The impact of environmental forces on Nigerian National Petroleum Corporation's growth strategy and profitability.

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The Impact of Environmental Forces on Nigerian National Petroleum Corporation's Growth Strategy and Profitability

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ABSTRACT

The Nigerian National Petroleum Corporation (NNPC) operates in an unprecedented environmental uncertainties and response to thes dynamism and turbulences determins either its success or failure. These environmental uncertainties are categorized into internal and external environmental forces. For instance, politics, regulatory, funding, and technology, human asset significantly impact profitability and growth strategy in the oil and gas industry. In anticipation of the frequent changes and uncertainty facing the industry triggered by these forces, IOCs and NOCs continue to develop and improve on existing strategies to promote growth and achieve profitability in response to these forces. Nevertheless, the growth and profitability of the NNPC are still on the decline, as revealed in the literature. Accordingly, several studies have investigated the underperformance of NNPC over the years. However, limited research has been conducted in the context of the influence of environmental forces on the performance of the NNPC. Hence, guided by the interpretive paradigm and adopting the qualitative research method, this study seeks to understand the underperformance of the NNPC by investigating the impact of environmental forces on the corporation's growth strategy and profitability. Data was collected from twenty-one research participants at three levels (NNPC employees, NASS members, and customers) using in-depth semi-structured interviews to gain insight into participants' experiences with the industry's environmental forces. Findings revealed the awareness and existence of growth strategies in response to environmental forces. Accordingly, to gain in-depth insight into the relevance of the current growth strategies adopted by the NNPC to achieve growth and profitability, current practices were compared to the constructs in Pettigrew's CCP theory. In the light of this, communication, decision-making, and role of human resources are identified as forces affecting the growth and profitability of NNPC. Consequently, the study recommends a review on the risk assessment of the corporation and industry, decision-making and communication process, the role of human resources, commercial and non-commercial objectives, amongst others.

The study concludes by modifying the Pettigrew CCP framework and suggest its application to NNPC and NOCs to achieve growth strategy and profitability.

Keywords: environmental forces, strategy, strategic issues, growth strategy, profitability, NNPC, Oil and Gas.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS

BPE	– Bureau of Public Enterprise
BRICs	- Brazil, Russia, India, and China
CAQDAS	- Computer Aided Qualitative Data Analysis System
CBN	- Central Bank of Nigeria
CSM	- Comparative Strategic Management
DPR	- Department of Petroleum Resources
EIA	- Energy Information Administration
FDI	- Foreign Direct Investment
FGN	- Federal Government of Nigeria
FMPR	- Federal Ministry of Petroleum Resources
GDP	- Gross Domestic Product
IIOCs	- Indigenous Integrated Companies
INOC	- Indigenous Oil Company
IOCs	- International Oil and Gas Companies
JV Cash	- Joint Venture Cash
KPMG	- Klynveld Peat Marwick Goerdeler
M & A	- Merger and Acquisition
NAPIMS	- National Petroleum Investment Management Services
NASS	- National Assembly
NDDC	- Niger Delta Development Commission
NEITI	- Nigerian Extractive Industries Transparency Initiative
NIEs	- Newly Industrialized Economies
NLNG	- Nigerian Liquefied Natural Gas
NNOC	- Nigerian National Oil Corporation

NNPC - Nigerian National Petroleum Corporation

NOCs - National Oil and Gas Companies

OECD - Organization for Economic Co-operation and Development

OPEC - Organisation of Oil Exporting Countries

PEF - Petroleum Equalisation Fund

PESTEL - Political, Economic, Social, Technological, Environmental, and Legal

PHCB - Petroleum Host Community Bill

PIAB - Petroleum Industry Administration Bill (PIAB)

PIB - Petroleum Industry Bill

PIFB - Petroleum Industry Fiscal Bill (PIFB)

PIGB - Petroleum Industry Governance Bill

PPMC - Pipelines and Product Marketing Company Limited

PPPRA -Petroleum Product Pricing Regulatory Agency

PTDF - Petroleum Technology Development Fund

PWC - PriceWaterHouse Coopers

RBV -Resource-based View

RESSA - Research Ethics Student and Supervisor Assessment Form

RGU - Robert Gordon University

SBUs - Strategic Business Units

SWOT - Strength, Weakness, Opportunities and Threat

CHAPTER ONE

Introduction and Overview of Research

1.0 Introduction

This chapter introduces the background and rationale for the study. The identified research questions, aim, research objectives, and the scope of research is presented in this chapter. The chapter then provides insight into the research methodology, and finally, the overall structure of the thesis.

1.1 Research Background

The oil and gas industry is a strategic industry underpinning modern society due to the relevance of its products (Inkpen and Moffett 2011) in the area of transportation, construction, manufacturing, agriculture, health and generation of electricity (Victor et al. 2012). However, the performance of the oil and gas industry is impacted by environmental forces. These forces include population growth, industrialisation, international trade and treaties, deregulation, climate change, tax regime, competition, technological innovation, merger and acquisitions, changing regulatory framework, human asset capacity development, leadership, organisational restructuring, and reinforcement of shareholder power (EIA 2019; Le Coze 2017; Tordo et al. 2011; Brooks et al. 2010; Stiglitz 2010; Wainberg and Foss 2007; Bridge and Wood 2005). These forces influence the strategic direction of an organisation (Tordo 2011; Victor et al. 2011), thereby impacting the attainment of an organisation's objectives (Clegg et al. 2017; Grant 2016).

Environmental forces have significant global implications for political stability, economic development, technological innovation, environmental management, and regulatory framework, especially for oil and gas-based economies that are complex and dynamic (Le Coze 2017; Victor et al. 2012; Inkpen and Moffett 2011; David et al. 2011; Tordo et al. 2011).

According to EIA (2016), the world's proven oil and gas reserve was more than 1.7 trillion barrels. However, the world's population is estimated at 7.7 billion people (World Bank 2019) consume about 30 billion barrels of oil and gas products (petroleum) annually at a price of about USD68 per barrel (EIA 2016). The revenue generated from the sale of the oil and gas products ranged between USD 75 billion to USD 87 billion annually (EIA 2016), and 77 per cent of these resources are under the control of national oil companies (NOCs). Despite the projections on the increase in demand for petroleum products due to the fast-growing world's population (Organisation of the Petroleum Exporting Countries (OPEC 2020), environmental forces continue impact organisations in the oil and gas endowed countries (Inkpen and Moffett 2011). For instance, the rise in world population from 7.5 billion in 2017 to about 7.7 billion in 2019 (Collins and Page 2019; EIA 2019; Simon 2019) increased the demand for oil and gas products. In 2017, for example, 27.64 billion barrels of oil and gas products were consumed whereas 31.71 billion barrels were consumed in 2019 at the rate of USD64 per barrel (EIA 2019). It also estimated that this consumption pattern would increase to 33.62 billion barrels in 2020 with a projection of 70 billion barrels in 2030, reflecting the global population growth (EIA 2019).

Contrary to these projections, the global demand drops by 2.5 million barrels per day in the first quarter of 2020 due to the coronavirus outbreak (environmental force). Although there was a pick-up in the second half of the year, the immensity of the former had a significant influence on the decline in annual global demand estimated at 90,000 barrels per day (EIA 2020). In addition, there was a substantial decline in the price of crude oil by mid-2019 from USD64.04 - USD40.47 per barrel, and this decline was consistent till December 2020. Consequently, it has become apparent that traditional growth strategies by oil and gas endowed countries are no longer sustainable in an increasingly globalised economy as environmental forces continue to impact the growth and profitability of the oil and gas industry (Johnson et al. 2018; Clegg et al. 2017; Lassere 2017; Grant 2018; Canales 2015; David et al. 2003; Levy et al. 2002). Furthermore, there are scholarly assertion that environmental forces influence the demand and supply of oil and gas products and determine the price of petroleum products (EIA 2019; Al-Fattah 2013; Hamilton 2011).

The forces also play a significant role in currency fluctuation, regional instability, international policies, socio-economic development and, most significantly, exert pressure on the top management role of setting the strategic direction for the organisation (Clegg et al. 2017; Thomson et al. 2017; Grant 2016; Lampel et al.

2014). As a result, oil and gas-based nations and decision-makers seek practical and strategic approaches to meet their organisational objectives to achieve growth and profitability (Victor et al. 2012; Steven 2007).

Prior notable era of the impact of these environmental forces includes the Suez Crisis of 1956, the Organisation of Petroleum Exporting Countries (OPEC) embargo of 1973, the Iranian revolution of 1979, the Iran-Iraq war of 1980, the Persian Gulf war of 1990 and the oil downturn of 2008 (Hamilton 2011). These incidences have led to the development of global oil and gas policy reforms that capture regulatory and market drivers to support strategies designed and applied in responding to these environmental forces on a country-specific basis (EIA 2016; Chen et al. 2016; Domaski 2015); Le and Chang 2015; Hamilton 2011).

In Nigeria, for example, the Nigerian National Petroleum Corporation (NNPC), the state-owned corporation established in 1977, is saddled with both commercial and non-commercial objectives. It aims at "adding value to the nations hydrocarbon resources" (NNPC 2021) to benefit all Nigerians and stakeholders, with a growth vision of becoming a world-class oil and gas company. It operates upstream and downstream activities with a significant focus on upstream activities and carries out its activities with the aid of its subsidiaries. According to PWC (2016), refining began March 1965, the nation had a refining capacity of 38,000 barrels per day (BPD) as at December 1965. Over the years, the NNPC's refining capacity has grown to be considered the 4th largest in Africa, with a total capacity of 445,000 BPD. Despite the capacity growth mentioned above and housed by four refineries located in three strategic states (Delta, Rivers and Kaduna), 80 per cent of the refined products are still imported to meet the Nigerian citizens' needs.

This inefficiency stems from existing skill gaps and inadequate finance (Al-fattah 2013), while Inkpen and Moffet (2013) attribute it to the struggle by the corporation to balance both commercial and non-commercial objectives. According to Fukuyama (2016), every recent occurrence within and outside an organisation has a historical context influenced by environmental forces (Brooks et al. 2010; Ibarra-Colabo 2008). However, NOCs such as the NNPC, whose major source of national revenue is dependent on petroleum products, continue to experience a significant decline in all aspects of the economy. This decline is due to the negative response by the energy industry to inevitable environmental forces. In recent times, the focus by academics, policymakers, and top management in the oil and gas industry has been on relevant strategies to manage the challenges posed by these dynamic environmental forces in a globalising world and best practices to address the accompanied impact in the industry by decision-makers (Haber and Menaldi 2011; Wainberg and Foss 2007; Dharwadkar et al. 2000).

The NNPC is the primary source of revenue generation for the Nigerian economy, as oil accounts for 80 per cent of exports, 30 per cent of banking sectors and 50 per cent of government revenue (World Bank 2021). As a result of the drop in oil prices, the government revenue was expected to decline from an already low 8 per cent to 5 per cent of the GDP by the end of 2020 (World Bank 2020). The corporation also engages in corporate social responsibility activities in education, health, infrastructure development, youth and sports development, economic empowerment, and others. With the relevant role of the NNPC in revenue generation for the economy and its social responsibility to the people, it is imperative to evaluate the growth strategies adopted by the corporation to ensure efficiency while achieving its strategic objectives amidst environmental forces to ensure growth and profitability of the corporation.

Hence, this study explores the influence of environmental forces in the formulation and implementation of the current growth strategies in the NNPC and its impact on the growth and profitability of the corporation.

1.2 Rationale of the study

The downturn in the price of oil and gas products from $114- $46 between June 2014 and January 2015 caused oil and gas producing nations and organisations to rethink their strategic process to ensure they remain relevant in the energy industry (Khan 2017). Many factors responsible for the volatile price situation on petroleum products has been the focus of research in the past decades. For example, demand and supply were considered the major factors influencing the volatile oil price (Huang 2014; Fang and You 2014). Also observed is the rapid economic growth trajectory by some large Newly Industrialized Economies (NIEs) like Brazil, Russia, India, and China (BRICs) believed to spur high demand for oil and gas products (Huang 2014; Fang and You 2014). Other authors attributed this factor to the inability of the BRICs to sustain the demand for oil and gas for industrial and domestic purposes (Christaine and Lutz 2015; Damir 2014). In the same vein, other scholars believe that supply rather than demand was responsible for the downturn (Baes et al. 2015; Aasim et al. 2015; Manescu and Nuno 2015). These scholars assert that increased supply accompanied by shocks in oil price expectations in July 2014 reduced demand for petroleum inventories by the unexpectedly weakened economies in December 2014. As a result, the major reasons for the downturn between 2014-2015 remained without consensus while the impact of this period remained significant in determining organisations performance, stakeholders and strategic processes adopted in the upcoming decades (Kitous et al. 2017; Leard et al. 2017; Chen et al. 2016; Domaski 2015; Baffes et al. 2015; Le and Chang (2015); Monaldi 2015; Tokic (2015).

However, research findings suggest that environmental forces are the most significant factors in the 21st century impacting an organisation's strategic process and eventual performance in the oil and gas industry (Clegg et al. 2018; Leard et al. 2017; Thomson et al. 2017; Baffes et al. 2015; Chen et al. (2016); Domanski 2015; Le and Chang 2015; Peachey and Lee 2011; Inkpen and Moffett 2011; Sohn 2003).

Accordingly, major studies in this area have focused on the effect of environmental forces on the re-alignment of growth strategies by top management in an organisation to enhance profitability and employee performance (Thomson et al. 2017; Clegg et al. 2017; Omeje 2017; Oyewunmi and Olujobi 2016; Anifowose et al. 2016; Akinrele 2016). Other studies have investigated the relationship between top management strategic process and organisational growth (Kitous et al. 2017; Monaldi 2015; Tokic 2015). However, a few studies have examined the effect of environmental forces on the re-alignment of growth strategies for profitability (Thomson et al. 2017; Clegg et al. 2017; Omeje 2017; Oyewunmi and Olujobi 2016; Anifowose et al. 2016; Akinrele 2016). Limited attention has been given to the influence of environmental forces on growth strategies in the oil and gas industry and its potential in influencing growth and profitability in emerging economies such as Nigeria who anticipate becoming dominant players in the energy industry (Akinola 2018; Nwokeji 2007). Hence, this study set to explore the impact of environmental forces on the growth strategy of the NNPC and its relevance in spurring growth and profitability.

In conclusion, environmental forces in the oil and gas industry present an opportunity for critical studies and understanding of their impact on NNPC's growth strategies to respond with a practical policy solution. Thus, this study revolves around the proposition that NNPC's growth strategy does not appear to be responding effectively to the impact of environmental forces concerning achieving the desired profitability objectives (Omeje 2017; Oyewunmi and Olujobi 2016; Anifowose et al. 2016; Akinrele 2016; Inkpen and Moffett 2011; Tordo 2011; Victor et al. 2011).

Accordingly, from the above assertion, being deliberately derived from the contextual discussion, the study presents study’s aim, the under-listed research questions and research objectives.

1.3 Research Aim

This research aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. The intention is to understand the organisation's poor performance and low profitability in order to improve the adoption of sustainable growth strategies that will lead to organisational growth and profitability.

1.4 Research Question

Following the review of a significant body of literature, this research will address the following research question:

What are the current growth strategies adopted by the NNPC, and how can these strategies be improved in response to environmental forces?

Accordingly, to address this research question, the study presents the following four research objectives below:

1.5 Research Objectives

1. To examine the environmental forces affecting the oil and gas industry in Nigeria.

2. To critically explore the current growth strategies adopted by the NNPC and examine the influence of environmental forces on these strategies.
3. To evaluate the impact of NNPC's growth strategies on the growth and profitability of the corporation.

4. To extend the CCP (Pettigrew) framework to provide an innovative growth model for effective decision-making that will spur growth and profitability in national oil and gas companies (NOCs) in the emerging economies, particularly, Nigeria.

1.6 Scope of Research

The study will consider growth strategies that evolve in national oil companies (NOCs) and, specifically, NNPC, after the oil and gas downturn of 2014 and 2017 when the research commenced. The year 2014 is the focus, being the peak of the oil and gas downturn (Monaldi 2015; Tokic 2015; Damir 2014). This period witnessed the last global oil and gas downturn attributed to environmental forces, such as the collapse of petroleum price due to competition, alternative production technique (Shale), global currency fluctuation, rise in diverse stakeholders' interest, and OPEC monitoring and protection strategy (Ochieng et al. 2018; Zoufa 2017; Agyapong 2017; Kitous et al. 2017; Leard et al. 2017; Behar and Ritz 2016; De Vita et al. 2016; Baffes et al. 2015; Chen et al. 2016; Domaski 2015; Le and Chang 2015). These numerous interrelated environmental forces impact the current growth strategies adopted by various oil and gas industry organisations. For instance, NOCs in developing economies like the NNPC, Nigeria desiring to enhance their revenue drive in the international market (PWC 2018; KPMG 2018; NNPC 2018; Opong et al. 2016), thus, necessitating this study.

1.7 Overview of Research Methodology

Epistemological interpretivist philosophy that explores a phenomenon by understanding the reason for actions, inactions, and the interaction between time and context (Campbell et al. 2017; Creswell and Poth 2018; Saunders et al. 2012) was considered suitable in evaluating global trends that interact with growth strategies. Consistent with interpretivism, qualitative method was deployed to make sense of data based on participants' personal experience, and the environment (Creswell and Poth 2018; Denzin and Lincoln 2011).

Based on qualitative inquiry and the research aim, which is to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability, the study adopted a case study approach. The case study approach draws on the experiences of a range of NNPC's top management and key stakeholders that will aid in achieving the overall aim of the study (Creswell and Poth 2018; Yin 2018). The primary data generated via an in-depth semi-structured interview from a purposeful sample of twenty-one (21) research participants. Nine (9) of these participants are involved in setting the strategic direction for NNPC. Four (4) of the participants are engaged in the strategy implementation process, and four (4) of these participants are committee members of the upstream and downstream of the Nigerian oil and gas industry in the National Assembly (NASS), being regulators and critical stakeholders in the industry. The remaining four (4) participants are vital customers/partners of NNPC. This study employed an in-depth semi-structured interview approach because of its flexibility and ability to allow the researcher to comprehensively understand the research participants' view regarding the impact of environmental forces on the corporation, perception on strategic issues, growth strategies, and critical success factors for the acceptance of the research recommendations. The collected data was thematically analysed using the inductive approach (Creswell and Poth 2018). NVivo 11, a Computer-Aided Qualitative Data Analysis System (CAQDAS), was deployed to guide data management because of its capacity to efficiently gather data and its transparent data management attributes (Creswell and Poth 2017). Data analysis was undertaken by the researcher (Marshall and Rossman 2015) to complement the benefits of CAQDAS in the study.

1.8 Structure of the thesis

This section provides an overview of all the chapters in this study. Chapter one has conceptualised the study in terms of background and rationale for the study, research scope, aim and research question, and objectives, and finally, the research methodology. The remaining seven chapters of the study are captured as follows.

Chapter two examines environmental forces and their impact on the oil and gas industry, particularly in emerging economies, such as Nigeria. This chapter also captures the oil and gas industry structure, international oil companies (IOCs), the emergence of national oil companies (NOCs), and specifically, the NNPC. The overview of the country under study.

Chapter three presents the extended literature review chapter that focuses on strategy, strategic change management in response to changes caused by the identified environmental forces that shape the strategic direction of NNPC.

Chapter four comprehensively examined and identified suitable strategic management frameworks, concepts, and theories. The chapter concludes by providing an in-depth analysis of the three lenses in the Content, Context and Process (CCP) Pettigrew (1988) framework and arguing the appropriateness and relevance of selecting this framework as a viable theoretical lens for the evaluation of the growth strategies adopted by the NNPC in response to environmental forces.

Chapter five provides the methodological approach employed for the study. The philosophical stance is discussed comprehensively in this chapter. Justifications for the research methods deployed, sampling approach, data collection, data management methods, and ethical considerations are discussed in this chapter.

Chapter six presents the analysis of the semi-structured interviews. This chapter also explains all the key findings concerning the global trends and their impact on the strategic process in NNPC that influence growth strategy. The chapter also incorporates the feedback of key results from the research participants.

Chapter seven discusses the key findings with relevant literature in strategy to achieve the aim of this study while also mirroring the study identified themes and sub-themes from data analysis.

Chapter Eight states the contributions to knowledge and practice. This chapter incorporates the study's conclusions and recommendations. The limitations of the study and suggestions for future research are also provided in this chapter.

In summary, the study consists of eight chapters.

CHAPTER TWO

Overview of Environmental Forces in the Context of the Oil and Gas Industry

2.0 Introduction

This chapter presents an overview of environmental forces and a detailed examination of their impact on the oil and gas industry. The chapter further shows how the oil and gas industry vis-a-vis the international oil companies (IOCs) and national oil companies (NOCs) interact with key environmental forces that influence the attainment of the organisation's commercial and non-commercial objectives within the context of growth strategy and profitability.

2.1 Environmental forces

Environmental forces remain the most significant concepts of the 21st century (Peachey and Lee 2011; Inkpen and Moffett 2011; Sohn 2003). This is because of the increasing impact of environmental forces on an organisation's strategic process and eventual performance (Clegg et al. 2018; Thomson et al. 2017; Grant 2016; Peachey and Lee 2011; Inkpen and Moffett 2011). Nevertheless, limited attention is given to the potential impact of environmental forces influencing the growth strategies in oil and gas organisations in emerging economies such as Nigeria (Akinola 2018; Nwokeji 2007). Some scholars attribute this minimal influence to a resource gap, e.g., limited talents, regulations and technology, which determine the growth strategies adopted by organisations and their subsequent impact on the performance of an organisation, particularly, NNPC (Akinola 2018; Akinrele 2016; Opong et al. 2016; PWC 2016; Al-Fattah 2013; Nwokeji 2007).

Given the complexity of the concept of environmental forces, this study is based on various definitions of environmental forces by various scholars. These scholars define environmental forces to mean all factors that influence an organisation's decision-making, therefore, impacting its achievement of commercial and non-commercial objectives, which in turn determines the growth strategy and profitability of any organisation (Clegg et al. 2018; Thomson et al. 2017; Grant

2016; Peachey and Lee 2011; Inkpen and Moffett 2011; Sohn 2003). These scholars categorise these factors into external and internal environmental forces to comprehensively understand and analyse their complexities and impact on an organisation's decision-making process.

The internal environmental forces refer to those tangible and intangible factors within the organisation's control (Clegg et al. 2018; Thomson et al. 2017; Grant 2016). Notable among these internal factors are an organisation's plans and policies, resource base (people, finance, and facilities), corporate image, leadership, organisational structure and process, structure, culture, financial forecast, and stakeholder relationship and degree of decision-making influence.

Fukuyama (2016) opined that every current occurrence within and outside an organisation has a historical context influenced by environmental forces (Brooks et al. 2010; Ibarra-Colabo 2008). Robinson and Simmons (2018) argue that despite historical and current events in an organisation, environmental scanning as a complex concept accommodates the diverse individual and organisational practices, hence allowing strategies to deal with the ever-changing environment. For instance, the upheaval of national populisms across Western countries, waves of industrialisation, privatisation, nationalisation, and corporatisation account for significant forces that have driven evolutionary change in the oil and gas industry (Le Coze 2017; Fukuyama 2016; Tordo et al. 2011; Inkpen and Moffett 2011; Wainberg and Foss 2007; Bridge and Wood 2005). Thus, environmental forces play a significant role in any industry's growth strategy and profitability, especially in the oil and gas sector. Oil and gas is a strategic industry that determines the activities of other sectors (health care, transportation, power) in modern society due to the relevance of its products (Inkpen and Moffett 2011; Victor et al. 2012).

2.1.1 Key External Environmental Forces

External environmental forces are encompassing and are not within the control of the organisation (Wainberg and Foss (2007). These include; population, political, economic, socio-cultural, technological, climate change, and the natural environment. As a result of the all-encompassing nature of these forces, oil and gas industries, especially the NOCs, remain exposed to these forces and consequently are faced with uncertainties about their ability to respond to the regular changes (Inkpen and Moffett 2011). Therefore, decision-makers are forced to review and innovate their growth strategies in response to these external environmental forces (World Bank 2019; PWC 2018; Al-Fattah 2013; Victor et al. 2012; Tordo et al. 2011). According to Inkpen and Moffett (2011), some external environmental forces such as innovation and technological advancement, mergers and acquisitions, industry substitutes and alternative fuels, and rapid economic growth trajectory have triggered evolutionary change by some Newly Industrialized Economies (NIEs) like Brazil, Russia, India, China, and South Africa (BRICS). These NIES countries spurred high oil and gas products to demand during the new millennium's first decade.

However, unpredictable external forces such as demand and supply, increasing global competition and reinforcement of stakeholder influence on organisations' decision-making continue to create concern among policy and decision-makers, as these inconsistencies make navigating solutions difficult (Akinola 2018; Clegg et al. 2017; PWC 2018; Akinrele 2016; Victor et al. 2012; Tordo et al. 2011). Furthermore, Liyanage (2010) opines that industries are continuously confronted with other factors such as changing demographics, global economic growth, evolving global talent demands, oil and gas price development, all resulting from the world's growing population.

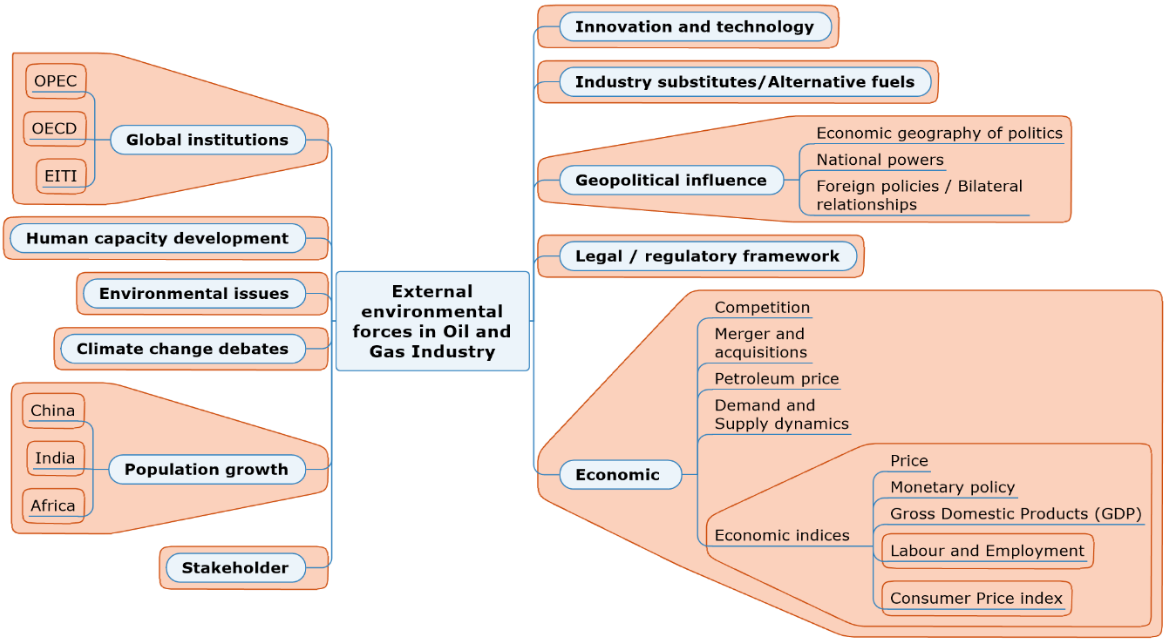
Finally, geopolitical development as an external environmental force confronting policy and decision-makers is multifaceted. Several scholars observed that geopolitical development entails influence and the economic geography of international politics, international trade, and national power that decision-makers are determined to leverage at every given opportunity (Al-Fattah 2013; Brooks et al. 2010). For instance, the oil and gas endowed countries in developed and emerging economies continue to exert greater control over their oil and gas resources to protect economic and political sovereignty (Al-Fattah 2013; Brooks et al. 2010). According to Wolf (2009), the government of some leading oil and gas endowed countries like Saudi Arabia, Russia, and Venezuela have been disinclined to share their oil and gas exploration and development activities with the IOCs (Nwokeji 2007). This initiated effort aims to take ownership of the economies by processing oil and gas endowed products while simultaneously generating the market for these products (Loung and Weinthal 2001; Grayson 1981).

Nevertheless, some governments in the emerging economies are yet to decide on the ownership structure and their growth strategy to meet both commercial and non-commercial objectives (Mahdavi 2014). This situation is not only attributed to inadequate requisite skill sets but also to the absence of technology, and the capital outlay, required to independently formulate and implement innovative strategies which will enhance the effective, efficient running of NOCs (Al-Fattah 2013; Victor et al. 2012; Tordo et al. 2011; Liyanage 2010 Rhea 2005). Evidence shows that most developing nations endowed with oil and gas products fail to control the NOCs to achieve the desired objectives due to management inefficiencies, ineffectiveness, corruption, and government interference.

In emerging economies, such as Nigeria, Chad, Libya, Angola, Sudan, and Ghana, external environmental forces such as political and economic instability, weak legal framework, regional uncertainty, and the debate on climate change and the transition to non-hydrocarbon sources of energy continue to remain significant external environmental challenges facing the nations mentioned above (Akinola 2018; Akinrele 2016; Nwokeji 2007). These external environmental forces put immense pressure on top management in all industries, thus requiring a reassessment of existing strategies to accommodate the impact of these forces to enhance growth and profitability (Akinola 2018; Baffes et al. 2015; Chen et al. 2016; Domaski 2015; Le and Chang 2015).

Based on the identified external environmental forces impacting the oil and gas industry, this study conceptually presents these external environmental forces for the purpose of oil and gas industry analysis in figure 1 below: The elements of this figure are further discussed extensively in the section that follows.

Figure 1: Key external environmental forces



Source: Author Generated (Based on synthesis of: Ahmad et al. 2017; (Victor et al. 2012; Inkpen and Moffett 2011; Tordo et al. 2011; Wainberg and Foss 2007).

- **Innovation and Technology**

The term innovation refers to the processes which leverage new technology and knowledge to create an improved product (Porter 1990). Similarly, Clark (1990) views innovation as adopting enhanced production processes and further classifies innovation into incremental, radical, modular, system, and architectural innovation. Other scholars' classification of innovation includes: basic, incremental, radical, discontinuous, new to the company, new generation, and finally, new to the world (Dismukes 2005; Betz 2003; Garcia and Calantone 2002; Shenhar et al. 1995; Mueser 1985). In addition, Dismuke (2005) points out that radical innovation leads to technological revolution based on the tenet of disruptive events, progress along the technological life cycle, and prior technological achievement (Ber et al. 2009; Schumpeter 1942). These scholars view technology as an applied scientific knowledge that involves the combination of component parts to seek cost reduction, boosted profit and efficiency in the oil and gas entire value chain (Arthur 2009; Dismukes 2005; Betz 2003; Garcia and Calantone 2002).

According to Hossani et al. (2017), environmental forces such as oil and gas price volatility, economic uncertainties, geopolitical forces trigger the continued need to innovate and technologically advance to continue to operate in a challenging, competitive, and uncertain business environment of the oil and gas industry. Innovation and technology play a critical role in the entire oil and gas exploration, production, and distribution process. According to Inkpen and Moffett (2011), several significant technological improvements developed in the oil and gas industry. This technology includes the increased deployment of 4D seismic imaging on top of 3-D seismic data to reduce drilling risk and improve recovery rate, directional and horizontal drilling to enhance production in the reservoir. Other notable technology and innovation deployed include wireless technology and geospatial analytics (Inkpen and Moffett 2011). With the improved communication process and speed compared to the traditional underground infrastructure, nanotechnology designed in a tailored pattern to accelerate the reaction in oil and gas production to enhance production volume and quality, consequently improving refining capacity.

Another recent innovation and technology invention in the oil and gas industry is fracking technology (Pagani and Pardo 2017; Wilke and Freeman 2017). Fracking or hydraulic technology is an innovative technology designed to recover oil and gas products from shale rock (Pagani and Pardo 2017). The fracking process involves drilling vertically or horizontally beneath the earth with a high-pressure water mixture (water, sand, and chemicals). The pressured water is directed at the rock to forcefully release the gas through an established wellhead (Pagani and Pardo 2017; Wilke and Freeman 2017; Wells and Wells 2013). For instance, the IOCs in developed economies of the world, such as the USA, Canada, Norway, and China, currently deploy fracking technology in oil and gas exploration and production. This fracking technology aims at enhancing improved refining capacity and speed (Inkpen and Moffett 2011).

Nevertheless, the fracking technological innovation has a high-cost implication and propensity to cause earth tremors (Pagani and Pardo 2017; Wilke and Freeman 2017). However, Wenrui et al. (2018) argue that continuous innovation of low quality, efficient and cost-effective technology is crucial for growth and sustainability in the oil and gas industry, as expensive technology negatively affects profit maximisation. Hence, an evaluation of cost-effective technology adopted by the NNPC is necessary to understand the organisation's response to the external environmental force of innovation and technology.

Furthermore, Hossani and Silva (2018) observe the emergence of Big Data Analytics as a new technology in the oil and gas industry. Big Data Analytics is a technological innovation deployed to manage large datasets with velocity, veracity, value, volume, variety, and complexity in oil and gas drilling, exploration, and production process (Mohammadpoor and Torabi 2018; Perrons et al. 2015). Big Data Analytics has the competence to analyse seismic and micro-seismic data, reducing drilling time and increasing drilling safety, improved pump optimisation, improved distribution and transportation process, improving reservoir features and simulation, amongst others (Mohammadpoor and Torabi 2018). Nevertheless, the application of Big Data in the oil and gas industry is constrained by a lack of specialist skills, quality data, lack of business support, and limited knowledge of the context of Big Data Analytics in the oil and gas industry (Mohammadpoor and Torabi 2018; Hossani and Silva 2018).

Similarly, Roberts et al. (2019) assert that despite the importance of innovation and technology as a critical success factor in the oil and gas industry, some companies, due to their conservative nature, continue to use obsolete technology or no technology at all. This poor receptiveness towards innovation and technology by some organisations is attributed to psychological factors. These psychological factors include the personality of managers (innovativeness), attitude (risk aversion), cognitive (risk perception), social (subjective norms), and organisational factors (leadership and organisational culture) (Rogers 1971). In support, Wood (2014) observes that psychological factors such as risk aversion, lack of ownership of technology and attitude of reluctance have a significant influence on the adoption of technology in the oil and gas industry (Oil and Gas Technology Centre 2018; Oil and Gas Authority 2018).

In retrospect, the emerging economies, mainly Nigeria have tried to develop an indigenous technological base (Akinwale 2016). For instance, petroleum technology institute (PTI), Effuru and Federal University of Petroleum Resources, Eferu, were established to boast indigenous technological base to meet requisite technical skill necessary for the oil and gas industry (PTI 2021; FUTE 2021). Nevertheless, factors such as lack of experienced teachers in oil and gas, lack of teaching resources, high interest rates from banks for academic development, lack of entrepreneurial capacity, and the low commercialisation potential of Nigerian university research departments limit technological development (Igbagara 2018; Hassani et al. 2017; Akinwale 2016). Furthermore, Al-Fattah (2013) points out that NOCs like NNPC have increased the direct outsourcing of their exploration and production activities to international oil servicing companies (Victor et al. 2012; Tordo et al. 2011). NNPC's outsourcing of its technological demand appears to meet the immediate need of the corporation, the corporation is faced with the consequence of outsourcing major upstreaming activities, which includes, high cost of production, dependence on foreign companies and most significantly, retrogression in the indigenous human capital development (Akinola 2019; Akinrele 2016).

The significance of technological innovation in enhancing improved refining capacity, speed of delivery and achieving a competitive edge in the oil and gas industry can never be over-emphasised. For instance, the deployment of oil and gas related technologies in developed economies has increased revenue generation and reduced the risk for the future of oil and gas by developing renewable energy platforms (Asghari et al. 2013, Inkpen and Moffett 2011). However, oil and gas-related technology development in emerging economies such as Nigeria is not developed (Akinwale 2016; Asghari et al. 2013). These scholars point out that oil and gas organisations in developed economies focus on developing and utilising internal engineering capabilities and advanced technical infrastructure to improved income generation for the organisation. Conversely, the NOCs in emerging economies like Nigeria generate revenue from the sale of crude oil and gas products while relying on outsourcing their industrial needs, such as planning and equipment, design, software, and engineering services from organisations in the developed economies such as the USA, Canada, UK, Norway, China, and Russia (Akinwale 2016; Asghari et al. 2013, Inkpen and Moffett 2011;

Van et al. 2007). This is contrary to Bell and Micheal (1999) argument that developing countries should focus on building an understanding of technological learning rather than production systems, and only to build on long-term competitiveness and profitability. Discourse relating to the transfer of oil and gas-related technologies from developed economies to emerging economies has been a recurrent issue on the global economic agenda (Asghari et al. 2013, Patlitzianas et al. 2007; Tanner et al. 2003). Nevertheless, this technology transfer debate is influenced by the volatile oil and gas prices, regulatory uncertainties, and technology sources' variability (Viscomi 2017; Asghari 2013; Patlitzianas et al. 2007). Similarly, Hassani and Silva (2017) attribute Nigeria's oil and gas-related technological gap to inadequate research and development funding to Nigerian universities by oil and gas companies since most technological services are outsourced to foreign companies and suppliers (Akinola 2019; Akinrele 2018).

As a result, top management in NNPC faces a challenge in managing most technically complex projects given the financial cost implication, regulatory framework and skillsets. Consequently, they require a review of their growth strategies to bridge this technological gap (Akinola 2019; Akinrele 2018; Viscomi 2017; Asghari 2013; Patlitzianas et al. 2007; Karl 2007)

- **Geopolitical influence**

According to Huber-Burns (2012), geopolitics is concerned with identifying correlations and causal variables linking geographical scope, global phenomena (civil and international unrest), and the political, economic, strategic, and commercial relationships between actors in the global arena. The arena in the oil and gas industry includes government, the IOCs, and NOCs. Similarly, Reynaud and Vaudy (2009) point out that geopolitics is concerned with the links and causal relationships between geographical space and political power (Reynaud and Vaudy 2009). In addition, Osterud (1988) compares geopolitics to a body of knowledge that evaluates specific strategic prescription based on the relative significance of land power. In summary, these scholars believe that the geographical size, natural and human-made resources that a country possesses determines its ranking globally (Reynaud and Vaudy 2009; Nye 1990; Osterud 1988). Nigeria is endowed with an oil and gas have proven reserve of 36.97 billion barrels and ranked as the 8th member country in OPEC with the largest reserve, contributing to 79.4 per cent of the world's proven reserves (OPEC 2020). Despite its large reserves, the country, contrary to the definition of land power translating into political power, rather attracts geopolitical influence on the country's oil and gas strategic process (strategy formulation and implementation) from major international players in the industry (USA, UK), while it remains a minor player (Ikein 2017; Noguera-Santaella 2016; Iwayemi 2007). Thus, Nye (1990) argues that the transformation of land power into political power is complex in international politics (Baldwin 1979). This complexity stems from the stance that a nation's ability to convert petroleum products from natural resources to finished products due to its vast knowledge and innovation equates power contrary to the former notion of land power (Nye 1990).

Reynaud and Vaudy (2009) highlight the energy area, nuclear area, military power, and geographical area as the four significant variables determining a country's geopolitical significance.

The energy area is concerned with the endowment of natural resources that are strategic in socioeconomic development and fundamental to international trade (Reynaud and Vaudy 2009). For instance, Rose (2007) points out that oil and gas crude are significant in global energy demand and relevant for creating bilateral opportunities for endowed countries in the international energy market. Furthermore, more than 90% of the world’s energy rents are generated from oil and gas products, making this product an essential and international global commodity (Reynaud and Vaudy 2009; Eiffert et al. 2003). The influence of land power, geographical size, and human-made resources on world geopolitics is significant, as these world powers are responsible for major decision-making in the industry. Thus, these variables should impact the growth strategies adopted by an organisation. (Bernhozl 2006; Van Houturn 2005).

The nuclear area focuses on the country's endowment of nuclear energy. According to Mossa (1999), nuclear energy is an essential discourse in geopolitics. The international community is interested in ensuring the economic stability of nuclear powers globally to reduce the risk of usage. Furthermore, the ownership of nuclear energy increases the bargaining power in the international market and bilateral relationship (Reynaud and Vaudy 2009).

Similarly, the emphasis on military power in geopolitics is to proxy the military importance of a country for domestic, regional, and international purposes (Reynaud and Vaudy 2009). Military influence in geopolitics has quid pro quo implications for oil and gas producing nations with limited military might and the most powerful military countries in international trade.

Geopolitics play a critical role in the Nigerian oil and gas industry given that the domestic demand for oil and gas products impacts the revenue generated from the sale of this product in the international market (Iwayemi 2007), considering that oil and gas is the mainstay of the Nigeria economy (Akinrele 2016). Although oil and gas proven reserves are not distributed evenly globally, the consumption of oil and gas products is global (Akinola 2018). Equally, the developed economies such as the USA, UK, China, amongst others, depend on adequate, cost-effective, and regular access to oil and gas products for political stability, economic development, and national security (Oluwasanmi and Ajonbadi 2017). Indeed, the geographical concentration of oil and gas reserves in relatively few nations, Nigeria included, makes such nations prone to socioeconomic and political instability (Iwayemi 2007). This contentious debate centres on continual oil and gas product access for economic development and national security.

These factors combine to trigger profound geopolitical implications for policy and decision-makers in emerging economies such as Nigeria. Furthermore, the 1977 Nigeria nationalisation reform of the oil and gas industry naturally created a geopolitical consequence. For instance, changes in the ownership structure of the IOCs, tax regime, leadership and organisational structure, profitability, revenue generation, and bilateral outcomes (Iwayem 2007).

Hence, the study explored these variables to understand their influence on the growth strategies adopted by the organisation to gain power in international politics which remains relevant in the industry.

- **Industry substitute / Alternative fuels**

The extant literature reveals the existence of many alternative forms of energy (Bahgat, 2014). For instance, fire generated from fuelwood was used over 350,000 years ago, human power in treadmills, hand-driven water pumps, wind energy that powered ships and vessels, and solar engines powered by the sun for electricity generation (Bahgat 2014). Fossil fuel is from the natural process, and this process facilitated energy technology that transforms organic materials from the remains of the living organism that can be used as a vehicle fuel for cooking and heating with minimal carbon dioxide (Bahgat 2014; Victor et al. 2012; Inkpen and Moffett 2011).

Although there are global technological innovations that facilitate fossil fuels production, energy from oil and gas products remains a dominant source (Inkpen and Moffett 2011). According to the estimate, global demand stands at 99.2 million barrels per day with sales proceeds ranging between USD 75 billion and USD 87 billion annually (EIA 2016; Baghat 2015).

Several scholars in the developed economies have observed that substantial attention has been given alternative fuels (Cole 2018; Sullivan 2017; Stevens 2016; Baghat 2015; Al-Fattah 2013). Thus, large investment flowed into alternative fuel projects such as solar, wind, hydroelectric and geothermal that are replenishable, in contrast to fossil fuel that is finite (Cole 2018; Sullivan 2017; Stevens 2016; Baghat 2015; Al-Fattah 2013; Victor et al. 2012; Tordo et al. 2011). These scholars identified oil and gas price instability, global climate change concerns, perceived competitive opportunities in the energy industry as responsible for this investment. The further investment in fossil fuel is attributed to minimal environmental impact, reliability, reduction in carbon dioxide emissions due to its low-hydrocarbon, and as a sustainable alternative source of energy which contributes significantly to the fight against climate change (Dincer 2000). Accordingly, diversifying the oil and gas industry and reducing the dependence on oil and gas products with attendant volatile product prices has become an important aspect that will influence the energy industry's growth.

However, in emerging economies such as Nigeria, the focus remains keenly on oil and gas products (Akinola 2018). Despite the global debate and the benefit of renewable energy sources, no clear and defined policy implementation roadmap exists for renewable energy in Nigeria (Aliyu et al. 2018; Edoma 2016; Aliyu et al. 2015; Sambo 2009; Iwayemi 2008). This concern seems to reflect FGN’s over-reliance on this mono-revenue generating oil and gas products. Reliance on the revenue from oil and gas products alone is a socioeconomic risk, considering that NNPC is yet to proactively key into the opportunities inherent in renewable energy transition despite becoming increasingly cost-competitive with fossil energy fuel (Akinola 2018; Akinrele 2016).

While there is limited understanding and appreciation of renewable energy in the Nigerian oil and gas industry, renewable energy discourse has gained momentum globally. Accordingly, policy and decision-makers are challenged by the uncertainties and future revenue implications of the renewable (fossil) energy revolution in the emerging economies, such as Nigeria. Hence, the impact of renewable energy on the growth strategies adopted by the NNPC for the future growth and profitability of the corporation as a major source of revenue for the nation was investigated.

- **Economic factors**

These are forces that influence commercial activities, thus requiring monitoring by policy and decision-makers in the oil and gas industry (e.g., price, merger and acquisition, exchange rate, inflation, demand, and supply amongst others (Victor et al. 2012; Tordo et al. 2011; Nwokeji 2007). For instance, price is a critical construct in the oil and gas industry (Victor et al. 2012; Tordo et al. 2011). The price of oil and gas, an international commodity traded globally over the past decades through globalisation, is determined by the international price (Inkpen and Moffett 2011). The price of oil and gas products is measured at the global price level. The international price in US dollars (USD) creates a corresponding increase in the oil and gas industry activities, thereby requiring consistent attention by oil and gas producing countries and industry players (PWC 2018; KPMG 2018; Opong et al. 2016). In addition, the pressure on the price of oil and gas will continue unabated (Akinyele 2016). This is because of the growing demand for oil and gas products reflecting world population growth (Collins and Page 2019; EIA 2019). Nevertheless, emerging economies, such as Nigeria, do not directly influence oil and gas price determination. Thus, their membership of the Organization of Petroleum Exporting Countries (OPEC) protects their oil and gas interest in the global market.

Another critical economic variable in the context of the study is mergers and acquisitions (M&A). Grant (2016) views mergers as a combination of two or more companies through share exchange to form a new company. However, the acquisition is the outright purchase of a company by another company (Parnell 2013).

M&A remain a strategy in the oil and gas industry given its potential to reduce costs of operation, technology transfer, gain high competitiveness, financial and human asset leverage, and international market penetration (Victor et al. 2012; Tordo et al. 2011; Ray 2010; Qiu and Zhou 2007; Lipton 2006). M&A has been a strategic practice adopted by IOCs in response to external environmental force. For instance, British Petroleum and Amoco, Total-Petrofina, Chevron-Texaco, and ExxonMobil responded to the impact of competition, price fluctuation, technology advancement, and geopolitical considerations through M&A (Inkpen and Moffett 2011). Research has shown that the oil and gas industry is much less concentrated today than 60 years ago (Monge et al., 2017; Harford 2005; Andrade et al. 2001). Consequently, opportunities exist for new entrants. However, huge capital investment is required amid continual dominance by the IOC and NOCs (Inkpen and Moffett 2011).

In retrospect, it is insightful to note that NNPC and the IOCs have always dominated the exploration, production, refining of oil and gas in Nigeria from the inception (1977) till the end of the 20th century (Akinola 2018; Akinrele 2016; Nwokeji 2007). However, the 21st century has witnessed the emergence of indigenous oil integrated companies (IIOCs) that undertake similar commercial oil and gas roles such as extraction, production, and distribution (Idris et al. 2018; Igbagara 2018; Ihua et al. 2009). For example, Dangote petroleum refinery and petrochemicals, Oando plc and Forte Oil plc commenced oil and gas activities in the Nigeria (Uzo-Peters et al. 2018; Teryima and Angahar 2014; Ogebe et al. 2013). These new entrants are competitive and profit-driven, aiming to meet their stakeholder interests (Uzo-Peters et al. 2018; Jegede 2012). Some scholars observe that these IIOCs are a catalyst for economic development through the creation of employment, responding to domestic demands, and tax remittance to the government (Uzo-Peters et al. 2018; Teryima and Angahar 2014; Ogebe et al. 2013; Balouga 2012). Nevertheless, their entrance tends to disrupt the Nigerian oil and gas industry. This is because of the IIOCs impact on explorative and production activities on the proven oil reserve, environmental implications, and economic and national security. As a result, this instigates the need for a comprehensive evaluation of their impact on NNPC’s growth strategies.

- **Talent Management Challenge**

According to CIPD, as cited by Stredwick (2014), talent consists of individuals that make an immediate difference to organisational performance or demonstrate the highest level of potential in the longer term. Talent management refers to the systematic attraction, identification, development, engagement, retention, deployment of valuable individuals to an organisation given the critical potential required by the organisation. Similarly, Al-Daihani al. (2015) observe that talent management captures the process that organisations deploy to meet immediate and anticipated human asset needs to meet organisation objectives. These scholars point out that the process also involves human asset audit, leadership development, succession planning, designing ethical culture, reward and performance management (Taylor 2018; Al-Daihani et al.2015; Orr and McVerry 2007).

Investment in talent management is crucial to improving organisations' performance and preparing individual employees to respond to environmental forces, e.g., government, revenue priority, regulations, and stakeholder management (Osaghele et al. 2018). Similarly, Harrison and Kessels (2004) observe that investment in talent management and the employer-funded scheme is vital for developing organisational and dynamic capabilities critical in sustaining organisations' competitive performance (Lepak and Snell 2003).

The prevalent concern in the oil and gas industry is the inability to attract and retain qualified talent (Al-Daihani al. 2015; Orr and McVerry 2007). These scholars attribute the talent challenge to factors such as work-life balance expectations, opportunities for career progression and personal development, difficulty in attracting qualified entry-level talents, and finally, an aging workforce (Jefri and Daud (2016). Furthermore, Jauhar et al. (2017), observe that the oil and gas talent challenge correlates with the high concentration of the generation Y segment of the world population in the industry. The generation Y segment of the world population includes people born in the 1980s and early 1990s. The generation Y demonstrate high confidence, ambitious, achievement-driven, independent thinking, entrepreneurial mindset, and continually seeking new career challenge (Jauhar et al. 2017). Consequently, this emerging type of global workforce has a high inclination to switch jobs, especially in the oil and gas industry, demonstrating volatility. Understanding the need of Generation Y to attract and retain this cadre of the workforce is creating a challenge for top management in the oil and gas industry.

All these scholars point out the traditional approach to resolving the oil and gas talent challenge is hiring the requisite skillset from oil and gas industry competitors, e.g., the IOCs, NOCs and other active oil and gas industry players. Nevertheless, this approach amounts to the process of reshuffling the existing oil and gas industry workforce. This approach creates sustainability and cost concerns if all organisations have to deploy the talent poaching approach to bridge the talent gap in the industry. Accordingly, top management in the oil and gas industry is challenged to revisit their human resource strategies to solve the talent constraints. According to Al-Halal (2017), oil and gas organisations will achieve sustainable returns, enhanced production and decreased operating cost, increased productivity, and lower attrition turnover if the talent challenge is resolved (Anjo et al. 2017; Jauhar et al. 201; Taylor 2018; Al-Daihani et al.2015). In this same vein, Crumpacker and Crumpacker (2007) state that the employees and decision-makers in dynamic businesses should have a mix of employees or appointees from at least two generations. This is aimed at encouraging knowledge-sharing resulting in; knowledge transfer, innovation, improved technology and the formulation and implementation of appropriate growth strategies that will meet the trend in the industry and sustain growth and profitability for the organisation. These scholars also emphasised the need for top management to expand their requisite skill asset search scope and even the codification of unwritten experience of either existing or transiting workforce in their organisation to achieve a long-term yield in productivity.

In the context of emerging economies like Nigeria, considerable advances have been made in understanding talent management challenges to proffer solutions (Osaghele et al. 2018; Adams et al. 2017). For instance, establishment of PTI and FUTE to boast indigenous talent. Nevertheless, factors such as a lack of modern teaching resources, lack of innovative oil and gas research and development institutions, transparency and accountability challenges, public sector mismanagement, outdated regulatory framework, institutional and infrastructural void, especially in the oil and gas industry, have been noted as a barrier to talent development (Osaghele et al. 2018; Akinola 2018; Akinrele 2018; Nwokeji 2007). Consequently, this talent gap has impacted significantly in the exploration and production activities of the Nigeria oil and gas industry. Furthermore, the talent concern is compounded by the non-passage of the petroleum industry bill (PIB) by the NASS and the presidency (Akinola 2018; Osaghele et al. 2018; Akinrele 2016). This bill, when passed, allows NNPC to introduce and implement global best practice in the context of human asset development and talent internationalisation (NNPC 2018).

The Nigerian oil and gas industry, particularly the NNPC, currently suffers from a skill shortage to accommodate the oil and gas industry (Akinola 2018; Akinrele 2016). This skillset gap is evidence in NNPC's inability to undertake complex offshore oil and gas projects, thus, requiring the NNPC to outsource complex exploration and production projects to the IOC and other players in the oil and gas industry (Akinola 2018; Osaghele et al. 2018; Akinrele 2016; Nwokeji 2007). Similarly, the interference of the government and political elites in the recruitment and selection process in NNPC appears to negate a competency-based approach in talent management. The competency-based approach in talent management can improve the human asset in an organisation and improve productivity (Alkhalaf et al. 2015; Dmitrieva at al. 2015). Nevertheless, integrating the competency-based in the NNPC approach appears to be a challenge due to the involvement of the government and political elites in the recruitment and selection process (Akinola 2018; Nwokeji 2007). As a result, it has become necessary for top management to review the existing talent management structure in anticipation of the current and future implications of the industry.

Summarily, these critical external environmental forces presented in figure 2.1 are often interdependent, cannot be easily separated. Nevertheless, there impact on all industries, but most significant on the oil and gas industry (Akinola 2018; Baffes et al. 2015; Chen et al. 2016; Domaski 2015; Le and Chang 2015; Inkpen and Moffett 2011). This significant impact is due the complexity of the structure of oil and gas industry (Akinola 2018; Baffes et al. 2015; Chen et al. 2016; Domaski 2015; Le and Chang 2015; Inkpen and Moffett 2011). To this end, top management should reappraise growth strategies and the interaction with the identified external environmental forces. Consequently, nations, particularly in emerging economies such as Nigeria, are under increasing pressure to understand the implication of these external environmental forces. This requires the design of robust business growth models for the explicit purpose of supporting the oil and gas industries that contribute significant revenue and bilateral opportunities to the government (Mommer 2002).

2.2 The Structure of the Oil and Gas Industry

The oil and gas industry is a significant player in the global economy due to the vital role of meeting the world's growing energy needs, e.g., electricity, transportation, and manufacturing (Inkpen and Moffett 2011). The revenue generated from exploration and production activity in the oil and gas industry has significant implications for regional and political stability, economic development, and environmental management. Nevertheless, revenue generation is historically associated with the environmental forces from the nineteenth century to date (Hamilton 2011).

The oil and gas industry structure includes inputs in raw materials, work-in-progress materials, labour, knowledge, capital, and finally, finished products bought by end-users based on the expected benefit of the product (Inkpen and Moffett 2011, Tordo 2011). The entire oil structure in the oil and gas industry is called the value chain. Value refers to what an end-user of a product is willing to pay. The value chain is deployed to identify the specific transactions that transform the raw material into final products throughout the transformation chain (Inkpen and Moffett 2011). According to Tordo (2011), the value system is a mechanism applied to identify the independent and economic segments of the industry, including the oil and gas industry, to ascertain company strengths, weaknesses, opportunities, and finally, threats (SWOT). The SWOT identification is made possible in the value chain because all the activities are conceptually, contractually, and physically linked (Tordo 2011). Weijermars (2010) also observes that the value chain is governed and interconnected by regulatory decision-making frameworks aimed at facilitating the development of the oil and gas industry (Weijermars 2010).

2.2.1 Value Chain in the Oil and Gas Industry

All the exploration and production activities in the oil and gas industry take place within the segment of three value chain: upstream, downstream, and midstream (Weijermars 2010; Inkpen and Moffett 2011, Tordo 2011; Stabell 2001). The value chain in the oil and gas industry commences with the upstream activity.

- Upstream

The upstream activities include obtaining exploration lease, identification suitable and accessible area, area assessment, drilling, and extraction of oil and gas crude by skilled experts in the oil and gas industry (Inkpen and Moffett 2011). Tordo (2011), observes that most upstream activities are conducted within the confines of crude resource availability, and this resource is most often under the ownership of the host government. Consequently, this requires establishing the contractual agreement through either bidding or negotiation (partnership and profit-sharing agreement) in line with the existing legal framework of the sovereign state. For instance, NNPC manages the holistic process from the exploration, production, refining, and gas development in Nigeria, mainly through profit-sharing contracts with IOCs (Akinola 2018). This contractual platform is undertaken by the Federal Government of Nigeria (FGN) in a bid to bridge the skill gap, the absence of required technology and financial competence to accommodate the upstream activity alone in the oil and gas industry (Akinrele 2016; Nwokeji 2007).

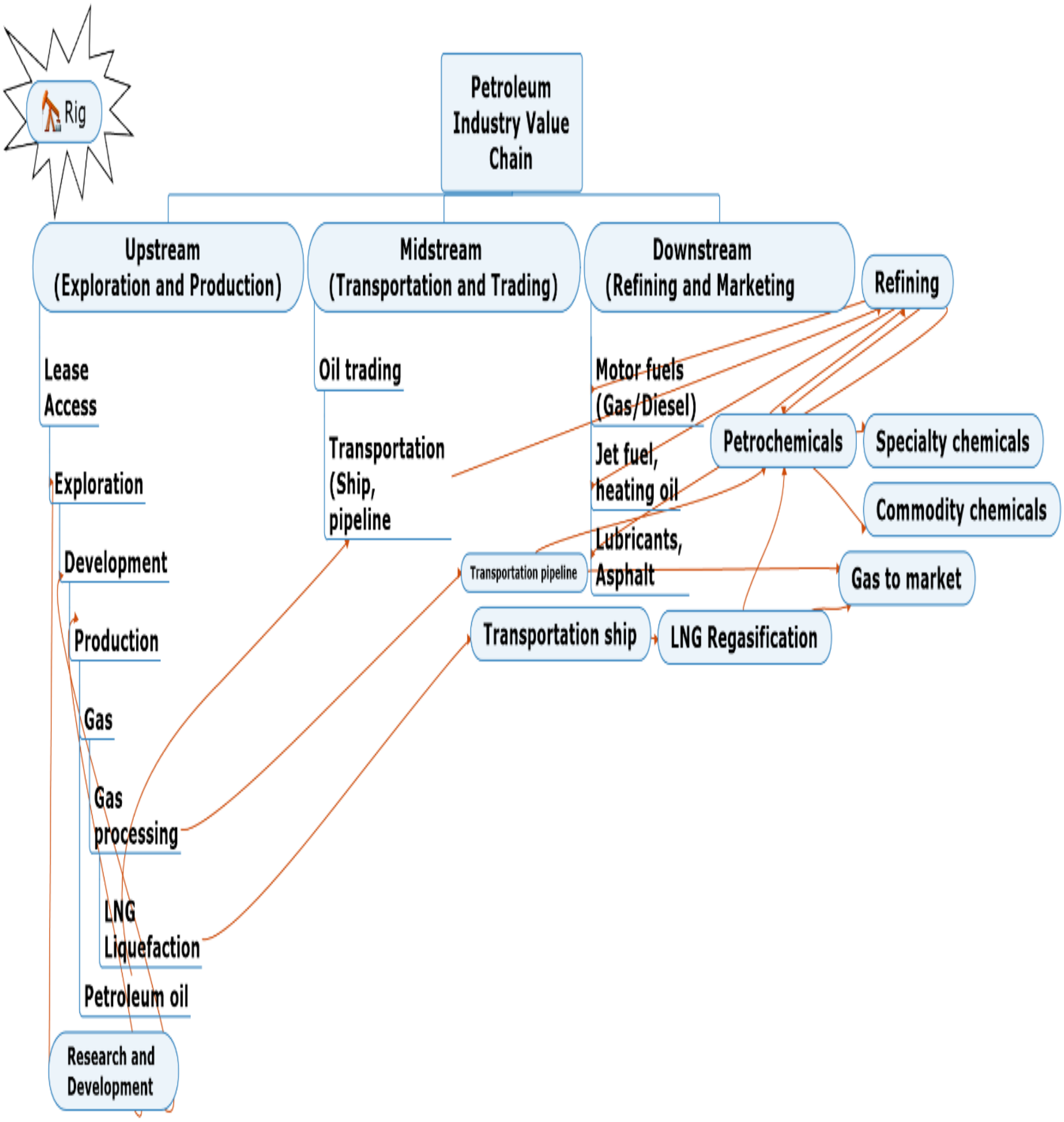
- Midstream

The midstream in the value chain is made up of activities that relate to warehousing, distribution, and trading of the transformed crude oil and gas products such as electricity fuel; lubricants; propane; butane; fuel oil; gas; gasoline; kerosene; and diesel (Inkpen and Moffett 2011; Victor et al. 2012). These final products are sold and conveyed a mechanised instrument called wellhead to the refinery, while pipelines transport the gas elements (Tordo 2011). The trading component of midstream activity involves critical players like the oil and gas refiners, oil and gas speculators, derivatives and commodity exchange companies, transportation companies, international oil servicing companies, the IOCs, NOCs, and finally, regulatory institutions like OPEC, OECD, EIA amongst others (Inkpen and Moffett 2011).

- Downstream

The downstream is concerned with oil and gas refining and gas processing of the oil and gas crude in final usable products before distribution to the warehouse, retail outlets, and direct manufacturing or industrial customers (Tordo 2011). Similarly, the downstream value chain segment is usually responsible for providing the raw or work-in-process materials needed in the petrochemical industry (Victor et al. 2012; Inkpen and Moffett 2011; Tordo 2011; Weijermars, R., 2010).
Figure 2 below shows the three tiers of the petroleum value chain and the various complex and interrelated activities conducted that leads to the final product such gas, petrol, lubricants, diesel, heating oil, asphalt, and other petroleum products (Victor et al. 2012; Inkpen and Moffett 2011; Tordo 2011).

Figure 2: Oil and Gas industry value system



Source: Inkpen and Moffett (2011).

In summary, several processes jointly contribute to transforming oil and gas resources into the final usable products. Activities linkages exist within or across companies and geographical boundaries. Equally, environmental factors such as regulation, human assets, technology, amongst others, influence the oil and gas value chain. Consequently, understanding the process flow of the value chain and the impact of the environmental factors is critical to policy and decision-makers in the oil and gas industry.

2.2.2 Key Drivers in the Oil and Gas Industry Downturn

According to Victor et al. (2012), there are notable forces that pressure the oil and gas industry. These forces that drive the industry include demand and supply, international policies, currency fluctuation, socioeconomic development, and oil and gas product prices (Akinrele 2016; Victor et al. 2012; Inkpen and Moffett 2011). Accordingly, Jaffe and Soligo (2007) identified the oil and gas products' price as a critical driver. The oil and gas product price is the most monitored commodity price in the global economy. This is because of the ripple effect that the oil and gas price has on most global consumables. As a result, uncertainties about future oil and gas prices and price volatility induces caution in the global industry (Jaffe and Soligo 2007). Furthermore, the relationship between oil and gas volatile prices and revenue from sales create uncertainties and pressure for top management in this globalised world (Lima et al. 2016; Grant 2003).

The price driver in the oil and gas industry has implications for revenue generation for oil and gas producing countries and the global trade (Inkpen and Moffett 2011). Oil and gas is an international commodity linked to worldwide energy needs with significant revenue implication for the oil and gas producing nations (Inkpen and Moffett 2011; Jaffe and Soligo 2007). According to Lederman and Maloney (2007), management of revenue generated from the oil and gas industry has significantly supported transforming the economies of oil and gas-based countries, including Saudi Arabia, United Arab Emirates, Russia, United Kingdom, Kuwait, Norway, Mexico and Canada amongst others (Arfaa et al. (2011); David et al. (2011). Thus, Lederman and Maloney (2007) argue that natural resources promote growth when combined with the accumulation of knowledge. However, Opong and Klaas (2016) posit that organisational growth becomes difficult to achieve without requisite skills, competence, and regulatory framework (Akinrele 2016; Victor et al. 2012; Nwokeji 2007). These factors, coupled with diverse stakeholder's expectations, have created difficulty in coordinating decisions and implementing growth strategies in the oil and gas industry (Opong et al. 2016; PWC 2016). Grant (2016) and Hussey (1997) also buttressed this assertion by stating that changes in the market have implications for strategic planning in organisations. Accordingly, a key consideration is required by top management in response to these forces that influence oil and gas prices.

Christaine and Lutz (2015) also argue that the forces of demand is a significant driver. These scholars observe that forces of demand account for the oil and gas downturn based on variables of oil price shocks, global aggregate demand shocks, and changes in precautionary demand concerning the uncertainties about the availability of future oil and gas supplies (Killian and Murphy (2014). However, scholars like Baes et al. (2015); Aasim et al. (2015); Manescu and Nuno (2015) are of the view that supply rather than demand was most responsible for the downturn. These scholars assert that increased oil and gas supply accompanied by shocks of oil price expectations in July 2014 that reduced demand for oil and gas products by the unexpectedly weakening economies in December 2014 is a critical driver.

Other potential drivers of the oil and gas downturn, as observed by Fantazzini (2016), include the explorative activities of the United States of America (USA) and Canada. These countries increased their operational activity to produce more oil and gas products by extracting oil from shale formations in North Dakota using the Hydraulic fracturing process (fracking). At the same time, the Canadian companies, on the other hand, obtained more from Alberta's oil sand which is the largest oil and gas reserve in the region (Fantazzini 2016).

Consequently, these enhanced productive activities by these two countries, followed by their reduced oil importation, put further downward pressure on global oil and gas prices. However, Saudi Arabia responded by deciding not to cede its market share by limiting its oil and gas productive activity regardless of the reduced oil imports by the USA and Canada during this period also culminated in the oil and gas downturn (Behar and Ritz 2016). Saudi Arabia kept its production stable, asserting that lower prices were more beneficial over the long term as against losing its market share. Its cheap oil and gas production mechanism further reinforced this position compared to other oil and gas production methods like fracking (Killian 2016). Similarly, global oil supplies exceeded demand in November 2014. This is because OPEC decided to maintain and peg oil and gas supply at 30mb/d, thereby squeezing higher-cost production against the USA fracking technology out of the oil and gas market while safeguarding OPEC member nations market share (Behar and Ritz 2016). Conversely, Toews and Naumov (2016) argue that the OPEC action was in contrast to its strategy of coordination of supply reduction during global financial distortions. Nevertheless, OPEC justified this strategy to protect its market share ((Behar and Ritz 2016).

Conversely, scholars like Behar and Ritz (2016); Killian (2016); Baes et al. (2015) claim that the oil and gas downturn of 2014/2015 was beyond the justification of economic fundamentals (demand and supply) but instead focus should be on irrational overreaction of non-fundamental factors like the declining Euro versus the USA dollar as observed by Tokic (2015); Damir (2014). This argument is consistent with the Bank of International Settlement Report (BIS 2015), which states that changes in production and decline in consumption are not a sufficient justification for the oil and gas downturn of 2014. Similarly, Dunahue (2016) asserts that a stronger USA dollar, accompanied by the declining global economy, was one of the many factors that led to the oil and gas downturn of 2014/2015.

The oil and gas industry is challenged structurally and internally due to a lack of talent, organisational framework, systems, processes, and attitudes that are sufficiently flexible and innovative in an uncertain business environment (PWC 2017). Scholars like Ochieng et al. (2018), Zoufa (2017); Agyapong (2017) and Akinrele (2016) hold similar views that drivers such as risk and change management, talent development and stakeholder interest have also influenced the oil and gas industry. Thomson et al. (2017) further assert that organisations seem to understand the need to be conscious of these factors that exert pressure on the environment and adopt and revise their growth strategies. This re-alignment of the organisation reflects the evolving dynamism of the contemporary business environment and diverse stakeholder expectations (Clegg et al. 2017; Omeje 2017; Oyewunmi and Olujobi 2016; Anifowose et al. 2016; Akinrele 2016).

The impact of these identified drivers relates to leadership and management style, human capacity development, organisational restructuring, shareholder interest, and growth strategies, thus requiring a response from policy and decision-makers to remain globally viable and competitive (Tordo et al. 2011; Inkpen and Moffett 2011). Some of the responses by policy and decision-makers are discussed in chapter 3.

In retrospect, the notable era of the impact these drivers include the Suez Crises of 1956, the OPEC embargo of 1973, the Iranian revolution of 1979, the Iran-Iraq war of 1980, the Persian Gulf war of 1990, the oil downturn of 2008, and finally, the 2014 oil and gas downturn (Ochieng et al. 2018; Zoufa 2017; Agyapong 2017; Hamilton 2011).

Specifically, mid-2014 is of particular interest being the most recent downturn in the oil and gas industry as the price collapsed from $114 June 2014 to $46 January 2015, thereby forcing some oil and gas producing nations and organisations to rethink their growth strategies and entire strategic process (Khan 2017). The strategic process is concerned with environmental scanning, strategy formulation, implementation, and evaluation to achieve set objectives (Clegg et al. 2017; Grant 2016). Drivers like rapid economic growth trajectory by some Newly Industrialized Economies (NIEs) like Brazil, Russia, India, China, and South Africa (BRICS) that spurred high oil and gas products to demand during the first decade the new millennium. However, much slower growth followed after 2010 (Damir 2014). The slow growth was due to an inability to sustain the oil and gas demand for industrial and domestic consumption by these BRICs countries, especially in China (Fang and You 2014). Knight (2014) points out that the reduction in interest rates, weakened currency, declining exports, and stock market activities contributed to the slow growth in China (Huang 2014; Fang and You 2014).

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Freeman (1984) identifies stakeholders to include clients, suppliers, employees, shareholders and other highly disparate groups such as the local community, environmentalists, and consumer protection organisations as well as government authorities, special pressure groups, competitors, the media as legitimate stakeholders for an organisation (Freeman 1984). Furthermore, Freeman (1984) opines that organisations should be concerned about the interests of stakeholders in the strategic process; this is in response to rising competitiveness, globalisation, and the changing complexity of company operations. Fredrick et al. (1992) admit that consideration should be given to the needs, interests, and influences of people and groups who either impact or may be impacted by the policies and activities of the organisation (Freeman 1984). This consideration is aimed at achieving a positive balance in the strategic process by the decision-makers within and outside the organisation.

The key stakeholders involved in the oil and gas industry include International Oil Companies (IOCs), National Oil Companies (NOCs), International Oil Servicing Companies (Independents and Juniors), host communities, local and international pressure groups, and finally, the consumers (Akinrele (2016); David et al. (2011); Nwokeji (2007); Uwafiokun and Uwem (2006).

The NOCs are government-owned companies and found in the Middle East, Africa, Asia, Latin America, and Europe (Victor et al. 2012; Inkpen and Moffett 2011; David et al. 2011). Examples of the NOCs include the Nigerian National Petroleum Corporation (Nigeria), Saudi Aramco (Saudi Arabia), National Iranian Oil (Iran), Statoil (Norway), Petrobras (Brazil), Petronas (Malaysia), China National Petroleum Corporation (China), Pemex (Mexico), Kuwait Petroleum (Kuwait), Abu Dhabi National Oil (United Arab Emirates), Sonatrach (Algeria), Rosneft (Russia) and Venezuela’s Petroleos de Venezuela (Arfaa et. al 2011; David et al. (2011).

Table 1 below shows some selected NOCs with respect to commercial and non-commercial role.

Table 2: Some selected NOCs showing commercial and non-commercial role.

S/N	NOC	Commercial	Non-commercial
1	Petroleos Mexicanos (Pemex)	✓	✓
2	Iran’s National Iranian Oil Company (NIOC)	✓	✓
3	China National Petroleum Corporation (CNPC)	✓	
4	Petrobras	✓	
5	Oil and Natural Gas Corporation of India (ONGC)	✓	✓
6	Kuwait Petroleum	✓	✓
7	Saudi Aramco	✓	✓
8	Sonatrach	✓	✓
9	Iraq National Oil Company		✓
10	Libya National Oil Corporation	✓	✓
11	Pentamina	✓	✓
12	Statoil	✓	
13	Qatar Petroleum	✓	✓
14	Petronas	✓	✓
15	PdVSA		✓
16	Petrovietnam		✓
17	Sonangol	✓	✓
18	Nigerian National Petroleum Corporation (NNPC)		✓
19	GEPetrol		✓
20	Societe des Hydrocarbon du Chad (SHT)		✓
21	Ghana National Petroleum Corporation (GNPC)	Undecided	Undecided

Source: Author Generated

However, the IOSCs are also privately owned with lesser capital outlay but expertise in their scope of operations, such as the Schlumberger and Canadian Natural Resources. Nevertheless, the IOCs and International Oil Servicing Companies both serve the local and international markets (Akinrele 2016; Arfaa et al. (2011); David et al. (2011). Nwokeji 2007).

Other emerging players in the oil and gas industry include indigenous integrated oil and gas companies (IIOCs), and in the context of Nigeria, the Dangote petroleum refinery and petrochemicals, Oando plc and Forte Oil plc (Uzo-Peters et al. 2018; Akinrele 2016; Teryima and Angahar 2014; Ogebe et al. 2013).

Regardless of the ownership status, the scope of operations, the IOCs, NOCs, IOSCs, finally, the IIOCs operate within a change-driven environment, where the environmental forces interact with their organisation's growth strategy (PWC 2018; KPMG 2018; Akinrele 2016; Victor et al. 2012; Nwokeji 2007). These environmental forces are evident in all industries in the global economy. However, this poses a more significant challenge for policy and decision-makers in NOCs, because aiming to achieve commercial and non-commercial objectives in the oil and gas industry is mainly because of the diverse stakeholder interest and dual objectives of the NOCs (PWC 2016; David et al. 2011).

To sum up, various studies have given several reasons for the oil and gas downturn of 2014/2015 and the impact on the global economy without reaching any consensus. Nevertheless, some organisations in developed economies have responded with instruments of privatisation, nationalisation, robust regulatory framework, scenario-based decision-making models, international financial reporting standards (IFRS), digital transformation models, and finally, market incentives and dynamic capability frameworks to forecast and manage the industry.

However, this is not the case in emerging economies like Nigeria (Akinola 2018; Akinrele 2016). This is because of the Nigerian oil and gas industry that is challenged with environmental factors (Akinola 2018; Akinrele 2016). For instance, the requisite skills and competence, political will, accountability and transparency, public governance, regulatory framework, leadership and organisational structure, technology gap, regional stability, weak supply and high demand, and finally, the frequent government interference in the entire oil and gas value chain (Akinola 2018; Akinrele 2016; Tordo et al. 2011; Inkpen and Moffett 2011; Nwokeji 2007). Moreover, these scholars argued that these factors have a relationship with the attainment of organisational objectives. Consequently, this exerts pressure and creates a need to rethink their growth strategies to remain viable and globally competitive.

2.2.3 Origin of the IOCs

International oil companies (IOCs) are sizeable multinational oil companies listed on the stock exchange (Kumar and Sulkumaran 2016; Stevens 2016; Victor et al. 2012; Tordo et al. 2011). IOCs are non-state-owned oil companies that are characterised by immense financial capability, skilled human assets, influence, and global operations (Nwokeji 2007). These companies primarily focus on the upstream (crude production), the downstream (refining and marketing), and midstream (distribution) aimed at maximising shareholder value through the efficiency of their operations (Ohene-Asare et al .2017; Stevens 2016; Victor et al. 2012; Tordo et al. 2011). IOCs, formerly referred to as the "seven sisters," dominated the global oil and gas industry in the first seventy years of the 20th century outside North America and the communist nations (Steven 2016). The IOCs include Mobil, Exxon (now ExxonMobil), and Chevron being successor parts of the Standard Oil Trust that the US Supreme court dissolved in 1911 into thirty-four independent companies under the Sherman Antitrust Act (Corwin 1932). The legal action was in response to the public outcry, which concerned the company's monopolistic status, leading to unreasonable restraint to trade due to its large size (Steven 2016; Pratt 1980; Corwin 1932). For instance, Mr Rockefeller, being a significant shareholder of Standard Oil Trust, expanded the business operations by the acquisition of its competitors (Boyd 2001).

Similarly, Standard Oil Trust (SOT) also capitalised on the company's size (Steven 2016). This capitalisation enables SOT to control almost 90 per cent of the USA oil and gas industry and, consequently, receive benefits such as discount rates from railroad transactions from the Railroad Commission that were not available to smaller companies in the American oil and gas industry (Steven 2016). The other four remaining companies from the Standard Oil Trust dissolution were the US

Headquartered Gulf Oil and Texaco, British Petroleum (BP), and an Anglo-Dutch company called Shell (Steven 2016).

Furthermore, Total S.A also joined this group of IOCs after the 2nd World War to form what is now known as "oil majors" (Sampson 1975; Penrose 1969). The oil majors controlled 70 per cent of refining capacity and transportation between 1945 and 1970 since the movement of oil and gas products was entirely through their integrated operations (Penrose 1969). Consequently, value creation was achieved by exploring and proving new but profitable reserves while also minimising the cost of services (Akinrele 2016; Victor et al. 2012; Tordo et al. 2011; Nwokeji 2007). The IOCs include companies like Royal Dutch Shell (Netherlands), British Petroleum (United Kingdom), ExxonMobil (USA), Total (France), Chevron (USA), Lukoil (Russia) and Phillips (USA). The IOCs are privately owned and operate globally with a focus on profit maximisation.

Another active player in the oil and gas industry that operates in almost a similar pattern to the IOCs is the international oil servicing companies (IOSCs). According to Inkpen and Moffett (2011), the IOSCs are not government-owned but are the non-integrated company that creates revenue from either oil and gas production or downstream operations for their shareholders. These companies are involved in some of the high-risk and innovative oil and gas regions in terms of geology, products, and digital technology ((Inkpen and Moffett 2011). Nevertheless, their financial base is slightly lower compared to the IOCs (Stevens 2016; Akinrele 2016; Victor et al. 2012; Tordo et al. 2011; Inkpen and Moffett 2011; Nwokeji 2007).

2.2.4 Features of International Oil Companies

The IOCs were vertically integrated companies until the 1980s, producing, refining, and marketing nearly 100 per cent of their oil and gas products (Inkpen and Moffett 2011; Stevens 2003). In response to environmental forces, the IOCs are compelled to buy oil and gas products for their refineries, sell oil and gas crude to other firms, and sell finished products (Inkpen and Moffett 2011). Thus, the IOCs currently deploy a strategy in the global operations as against the earlier classic approach of vertical integration (Stevens 2003). Penrose (1969), points out that the IOCs leverage on their interlocking shares in the upstream joint ventures of oil and gas exporting countries to regulate competition globally. The interlocking process is conducted in a bid to meet the continual increase in the quantities of oil and gas products to the global market as an alternative to other energy sources like coal. Markets for oil and gas products were divided into regions between the oil majors by the Achnacarry agreement, signed in Scotland in 1928 (Penrose 1969). This agreement was an early effort demonstrated by oil and gas producers to set production quotas amid trends like the discovery of oil and gas in the East Texas field that led to the production boom. Jones (1995), points out that the production boom in this era triggered a price fall in the oil and gas industry leading to the Railroad Commission of Texas to introduce production control measures (Bina 2006; Jones 1995; Penrose 1969). Consequently, oil and gas prices were monitored and regulated by posting prices for purchasing oil and gas crude. Similarly, commercial activities within each organisation's integrated system are coordinated by transfer prices (Stevens 2016).

Steven (2016), attests that the IOCs exert immense influence globally due to their capital outlay and productive human assets. Their operations and control are on the decline in response to the impact of environmental forces (Akinrele 2016; Victor et al. 2012; Tordo et al. 2011). Steven (2016) links this decline to the wave of nationalisation that continued in most of the oil and gas producing regions of the world (Middle East, Latin America, and Africa) in the 1950s, 1970s and 2000s (Barros et al. 2011; Victor et al. 2012; Tordo et al. 2011). Scholars like, Philip (2002); Cohn Philip (1982); (1968), refer to this pattern as the "diffusion effect" whereby nationalisation acts as a strategy to take total ownership and control of national oil and gas resources from the perceived pioneer countries. Nevertheless, countries with a solid legal and political structure find it challenging to nationalise existing IOCs without experiencing exorbitant economic cost and negative political consequences (Tsebelis 2002; Henisz 2004).

The wave of nationalisation in the oil and gas producing countries caused capacity constraints by the IOC in their exploration and production activities (Victor et al. 2012; Tordo et al. 2011; Nwokeji 2007). This scenario heightened the influence of the government of oil and gas producing countries and consequently led to the emergence of national oil companies.

2.3 Emergence of the National Oil Companies (NOCs)

The oil and gas industry, formerly managed by the IOCs is now dominated by state-owned companies known as NOCs (Steven 2016). These NOCs concentrate around the Middle East, Latin America, Europe, and Africa (Victor et al. 2012). NOCs are oil companies with the government as critical stakeholders, and their primary mission is to protect the interest of the host country (Al-Fattah 2013; Victor et al. 2012; Tordo et al. 2011). NOCs own about 73% of the world oil proven reserves and 61% of the production capacity (Mahdavi 2014). The NOCs are among the top fourteen oil and gas companies in the global energy portfolio with a significant global economy presence (Victor et al. 2012; Nwokeji 2007). NOCs functions are not just limited to commercial roles but also non-commercial responsibilities. For instance, oil and gas industry regulation, social services, and political roles, as observed by (Victor et al. 2012; Nwokeji 2007). Wainberg and Foss (2007) summarised NOCs core objectives as including the development of the oil and gas industry and its contribution to their respective nations' overall socioeconomic and political development (Zakariya 1980; Megateli 1980).

The NOCs emergence dates back to the early twentieth century when the industrialised world initiated an effort to take ownership of the economies by processing oil and gas crude and also simultaneously developing the market for these oil and gas products (Wolf 2009; Grayson 1981). This action was in response to environmental forces such as a dynamic oil and gas product demand and supply, the improved oil and gas product price, and the observed negative impact of the dominance of the industry by the IOCs exploration, production, distribution, and oil and gas price determination (Tordo et al. 2011; Victor et al. 2012; Ross 2012; Haber and Menaldi 2011; Aslaksen 2010; Dunning 2008).

Consequently, Austria-Hungary developed the first NOC in 1908, when IOCs experienced an excess supply of crude oil (Tordo et al. 2011). Emperor Franz Joseph 1, King of Austria and Hungary approved the establishment of NOC to complement oil and gas production and to further expand the market for the oil and gas market (Heller 1980). Likewise, European states vested with colonial powers formed alliances with private oil and gas companies to control both the domestic market and upstream production activities within their territorial domains. According to Tordo et al. (2011), the government of the United Kingdom in 1914 invested £2.2 million to obtain a 51% ownership stake in Anglo- Persian

Oil Company (now known as British Petroleum - BP). The purchased stake is significant; however, it is viewed as passive due to limited management control and only two government representatives appointed into the board of BP. This investment decision hinges on the security of the supply of oil and gas products on the eve of World War 1. The purchased stake approach by the British government confirms Tordo et al. (2011) assertion, that "to achieve security and diversity of oil supply, the state could enter into long-term supply contracts as a temporary measure, but ultimately the state could become the independent owner and producer of its supplies of liquid fuel".

Similarly, in 1922, Argentina's Yacimiento Petroliferos Fiscales (YPF) was established (McPherson 2003; Van Der Linde 2000). Similarly, nations with developed corporate tradition like France formed Compagnie Francaise del Petroleos (CFP) in 1924, and Italy's Azienda Generale Italiana Petroli (AGIP, now part of Eni) begun operations in 1926 (Victor et al. 2012; McPherson 2003; Linde (2000).

The last four decades also witnessed a similar trend by the developing economies of the world. Mexico in 1938 expropriated the USA and Dutch petroleum interest to form Petroleos Mexicanos, also known as Pemex (Victor et al. 2012). Pemex is the first major NOC created by the Mexican government's seizure of IOCs oil and gas assets for a purpose deemed to be in the public and state interest. Iran's National Iranian Oil Company (NIOC) was also founded in 1948, Brazil's Petrobras in 1953, and in 1956, the Oil and Natural Gas Corporation of India (ONGC) was also established (Akinrele 2007). These governments established and managed these NOCs as economic growth strategies after the Second World War. However, few of these countries had much influence on the demand and supply of oil and gas products due to the little leverage their government had over the international market for their oil and gas products (Victor et al. 2012). Some scholars argue and attribute the small advantage of these respective governments of the NOCs to the lack of international presence being a new entrant in the global oil and gas market with a limited requisite workforce and technological resources to favourably compete in this era (Tordo et al. 2011; Victor et al. 2012; Ross 2012). Equally, the IOCs exerted absolute control of all oil and gas activities and marketing functions before this response by the NOCs. It is also worthy of note that Petrobras Brazil was established in 1954 through congressional decisions to create a state monopoly in the Brazilian oil and gas industry (Victor et al. 2012). Regardless of the time and mode of establishment of the NOCs, the impact of their establishment and entrance into the international oil and gas market is significant for top management globally, especially in the context of change in revenue structure, ownership, and control as observed by Ross 2012; Haber and Menaldi 2011; Aslaksen 2010; Dunning 2008).

The 1960s and 1970s also witnessed the emergence of the NOCs in the developing economies of the world (Table 2.2) where most of the oil and gas producing countries took a more assertive role concerning the ownership structure of their respective oil and gas industry (Victor et al. 2012).

Table 2.2: shows some selected NOCs, countries, and dates of establishment NOCs, where assertive role and ownership was established.

Table 3: Some selected NOCs, countries, and dates of establishment NOCs, where assertive role and ownership was established.

S/N	NOC	Country	Year
1	Yacimiento Petroliferos Fiscales (YPF)	Argentina	1922
3	France's Compagnie Francaise del Petroleos (CFP)	France	1924
4	Azienda Generale Italiana Petroli (AGIP, now part of Eni)	Italy	1926
5	Petroleos Mexicanos (Pemex)	Mexico	1938
6	Iran's National Iranian Oil Company (NIOC)	Iran	1951
7	China National Petroleum Corporation (CNPC)	China	1949
8	Petrobras	Brazil	1953
9	Oil and Natural Gas Corporation of India (ONGC)	India	1956
10	Kuwait Petroleum	Kuwait	1960
11	Saudi Aramco	Saudi Arabia	1962
12	Sonatrach	Algeria	1965
13	Iraq National Oil Company	Iraq	1967
14	Libya National Oil Corporation	Libya	1970
15	Pentamina	Indonesia	1971
16	Statoil	Norway	1972
17	Qatar Petroleum	Qatar	1974
18	Petronas	Malaysia	1974
19	PdVSA	Venezuela RB	1975
20	Petrovietnam	Vietnam	1975
21	Petro-Canada	Canada	1975
22	British National Oil Company	United Kingdom	1975
23	Sonangol	Angola	1976
24	Nigerian National Petroleum Corporation (NNPC)	Nigeria	1977

25	GEPetrol	Equatorial Guinea	2002
26	Societe des Hydrocarbon du Chad (SHT)	Chad	2006
27	Ghana National Petroleum Corporation (GNPC)	Ghana	2011

Source: Author Generated

These countries took ownership of IOCs oil and gas assets and operations in their domains in order to establish their own NOCs as an economic development strategy (Barros et al. 2011).

It is important to emphasise that the number of oil and gas producing countries is consistently on the rise based on the discovery of oil and gas reserves in some emerging economies, such as Uganda, Tanzania, Kenya, Belize, Afghanistan, and Surinam Guyana entering the oil and gas market (Mahdavi 2014). Nevertheless, the government of most of these countries is yet to decide on the ownership structure and their specific growth strategy. This position can be attributable to skillset shortage, financial limitations, regulatory framework and inability to accommodate the impact such global competition, geopolitical influence amongst others as observed and debated by scholars like Mahdavi 2014; Barros et al. 2011; Tordo et al. 2011; Victor et al. 2012; Ross 2012, Akinrele 2016, Nwokeji 2007).

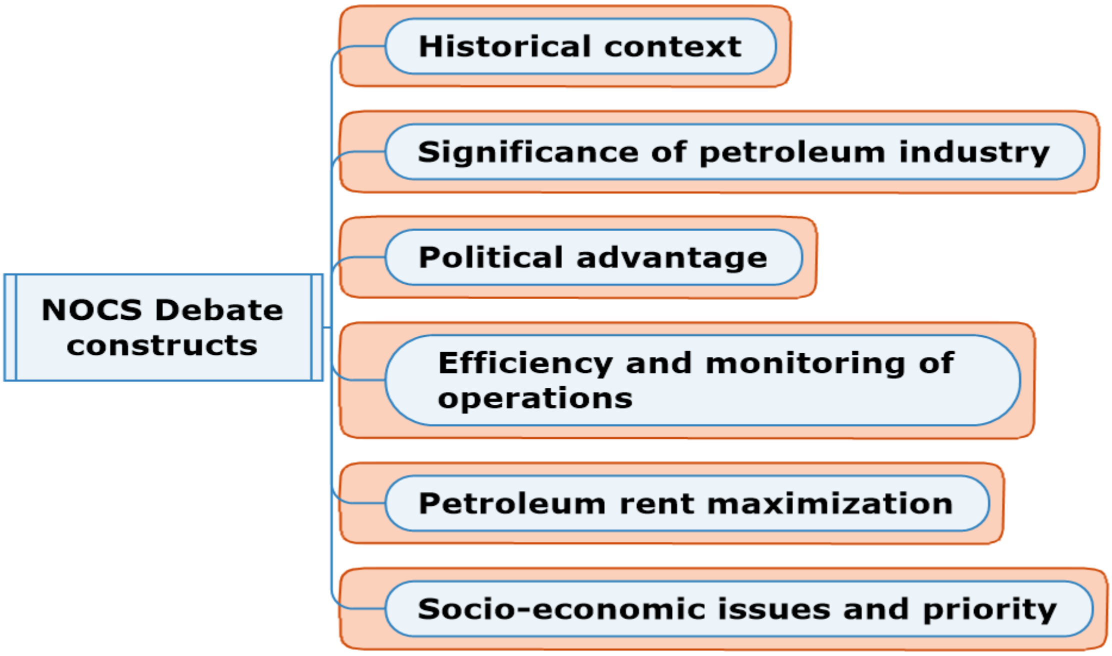
2.3.3 Debate on the emergence of the National Oil Companies

The establishment and impact of the entry of the NOCs into the international oil and gas market has changed the global industry's dynamic (Tordo et al. 2011). Academics and oil and gas professionals have developed a keen interest in the argument in favour of or against the emergence of NOCs in the oil and gas industry. Tordo et al. (2011), assert that NOCs can be in the form of monopolies or participate in the competitive global market. NOCs can also be viewed as asset operator or financial holding entities (Victor et al. 2012). Nevertheless, the value chain, business profile, market orientation, and internationalisation of NOCs varies significantly (Tordo et al. 2011).

Consequently, any argument about NOCs risk being inevitably generic. Thus, to manage this variation, the study assumes NOCs to have a critical role in the oil and gas industry. Furthermore, this study posits that the NOCs impacted by the influence of environmental forces in a bid to achieve the set objectives.

Notwithstanding the significance of the NOCs in the oil and gas industry, the debate about NOCs creation and proliferation persisted after the 2nd World War and to date (Victor et al. 2012). Scholars like Akinrele (2016); Victor et al. (2012); Tordo et al. (2011); Gurie et al. (2009); Steven (2004) summarised the justification for and against the creation of NOCS into six constructs which include: historical context, the significance of oil and gas industry, political advantage, efficiency and monitoring of operations, oil and gas rent maximisation and, socioeconomic issues and priority as depicted in figure 3.

Figure 3: NOCs debate constructs



Source: Author generated

- **Historical context**

These scholars opine that establishing NOCs around the Middle East, Latin America, Europe, and Africa was in response to environmental forces and hence has a historical context. According to Hartshorn (1993) and Garyson (1981), the IOCs were observed to be protecting the interest of the imperialistic governments and with little cognisance paid to the concerns of the nations that warehouse the oil and gas products (Nwokeji 2007).

Similarly, Marcel (2006) claims that the IOCs are short-term profit-driven to the detriment of the long-term profit objectives of the host nation. Likewise, the IOCs are accused of deliberately deploying low future price scenarios to undervalue the profitability of any joint venture projects (Tordo et al. 2011). These strong views on both sides by the host government and the IOCs make decision making difficult. However, these cultural and operational gaps between the NOCs and IOCs seem to have narrowed in some cases. For instance, Saudi Aramco and Kuwait Petroleum Corporation acquired stakes in Showa Shell in Japan (Tordo et al. 2011). Nevertheless, these elements contributed to the expropriation reform that focused on restoring national sovereignty and as a symbol of independence from the imperial powers (Stevens 2004; Linde 2000; Olurufemi 1991; Jaidah 1980). The historical context connects with the political view that a nation can manage social and economic challenges from the amity of such state actions (Yergin and Stanislaw 2002).

Contrarily, empirical evidence shows that public ownership and management of the NOCs by the government is less efficient and susceptible to market failures (Shleifer and Visny 1998). The historical context of establishing NOCs causes the strategic decision-making process to be vulnerable to an ideology stance, and this can interfere with the revenue maximisation and economic efficiency of the NOCs. For instance, the memories of the domination by the imperial powers through the IOCs and the onerous nationalisation process continue to affect behaviour and decision-making in the oil and gas producing countries (Tordo et al. 2011).

Other scholars are of the view that the significance of the oil and gas industry cannot be over-emphasised, especially in an economy that is mainly dependent on this international commodity as a global bargaining instrument (Gurie et al. 2011; Victor et al. 2012; Nwokeji 2007). According to Robinson (1993), oil and gas is a valuable commodity, and because of the impact of the proceeds of this product, it cannot be left solely to the dynamism of the market. Oil and gas wealth is a source of financial guarantee, political stability, and in some cases, military support. These scholars opine that the government's direct ownership and management of the industry enhance the government's negotiating position (Gurie et al. 2011; Victor et al. 2012; Nwokeji 2007; Robinson 1993). Similarly, Tordo et al. (2011) observe that the involvement of the government in the oil and gas industry through the NOCs provides an opportunity for direct control, strategy formulation and implementation, product pricing and subsidy policy, recruitment and selection, security and balance of power for both domestic and international markets (McPherson 2003).

Developing countries in the past have demonstrated the inept management of NOCs (Tordo et al. 2011). The management ineptitude is attributable to the weak regulatory and fiscal framework (Al-Fattah 2013). Likewise, NOCs have the government as a crucial stakeholder and other diverse stakeholders that strive towards achieving their interests. When the relationship between the government and these other stakeholders negatively affects the organisation's operations, this becomes detrimental to the organisation growth strategies and the attainment of commercial and non-commercial objectives (O'Higgins 2010).

- **Oil and Gas rent maximisation**

Oil and gas rent maximisation is another argument given in support of NOCs. According to Tordo (2007), the oil and gas rent is measured by the variables of the total amount of rent generated and the relative share recorded between the government and the NOCs and IOCs. Tordo (2007), further points out that the government wants to capture the highest possible rent to the detriment of IOCs regardless of the return on investment. Rent maximisation is a cardinal area of discourse that has not been addressed. This is attributable to weak regulatory and fiscal frameworks by developing countries endowed with oil and gas products. According to Tordo (2007), the budgetary and legal framework requires the government to have the requisite skills to regulate the activities of IOCs. However, the absence of such needed skills has made developing countries endowed with oil and gas products to opt for the NOCs creation to avoid such regulatory functions on the IOCs.

- **Socio-economic impact**

McPherson (2003) argue in favour of establishing NOCs given the reciprocal effect on economic activities. For instance, as employment opportunities, entrepreneurship development, provision of infrastructural amenities (schools, scholarship, hospitals, roads, and community development). Similarly, Horn (1995) noted that NOCs emergence creates income distribution via subsidised prices and collateralised financing options for the government (Gayson 1981). In the same way, Marcel (2006) acknowledges that some NOCs develop economic linkages around the oil and gas value chain to enhance long-term capacity building and diversification of the economy. For instance, Fattah (2013) observes that Saudi Aramco creates conduits for wealth redistribution to the citizenry. Similarly, Al-Fattah (2013) also points out the NOCs role to include economic, social, and political responsibilities (financing, welfare provider, and non-energy services). Marcel (2006) acknowledges the impact of NOCs in fulfilling socio-economic expectations by creating basic amenities such as roads, health care services, and education. These responsibilities define the feature of NOCs compared to the IOCs (Marcel 2006; Khan 1987).

Several scholars have had an extensive discussion for or against the creation of NOCs. Nevertheless, there are observed gaps in the performance and efficiency of these state-owned entities. According to Tordo et al. (2011), the NOCs, in most cases, have not met their stated commercial and non-commercial objectives, which is the fulcrum for their creation. While the commercial objectives centre on profit maximisation, the non-commercial goals are most controversial and focus on social and economic development, which by implication, erode the commercial efficiency of the NOCs (Wainberg and Foss 2007). Zakariya (1980), acknowledges that the performance gap is not unrelated to the conflicting nature of NOCs dual objectives (Megateli 1980). This apparent failure is attributable to some critical internal and external drivers that influence the growth strategies. By implication, how much or less NOCs can respond to the environmental forces in the oil and gas industry amid the attainment of dual objectives.

2.4. Key Internal and External Drivers of NOCs

These internal factors are further categorised into strengths if their impact brings positive outcomes and a weakness when their influence prevents the organisation from achieving set objectives (Asrilhant et al. 2007).

Some scholars acknowledge the positive reasons for establishing the NOCs by the government of oil and gas producing countries (Steven 2016; Tordo et al. 2011). Nevertheless, the achievement of the commercial (profit maximisation) and non-commercial objectives (social welfare maximisation) remains questionable with no clear answers (Ahmad et al. 2017; Steven 2016; Tordo et al. 2011). Ohene-Asare et al. (2017) surveyed fifty top IOCs and NOCs between 2001 to 2010. This survey revealed significant scale mismanagement in NOCs production activities compared to that of the IOCs where reducing productive inefficiencies was observed minimal. This scenario is related to the resource curse syndrome, as observed by Victor et al. (2012); Inkpen and Moffett (2011). These scholars noted that the apparent failure of the NOCs to convert the wealth of natural resources into commercial and non-commercial benefits affects sustainable economic development and the attainment of set objectives. Ahmad et al. (2017) point out six factors that have an immense impact on the commercial and non-commercial objectives of the NOCs. These factors include political instability, economic uncertainties, competition, regulatory framework, stakeholder pressure, and energy transition. For instance, Omeje (2017) confirmed that NNPC is confounded with the task of balancing profit maximisation and national socio-economic growth responsibilities. This is due to the ambiguity of this role and other factors such as a lack of skillset gap, lack of accountability and transparency, global competition, the digital technological revolution, lack of a clear policy framework and implementation mechanism, government interference, amongst others (Victor et al. 2012; Tordo et al. 2011). Likewise, Tordo et al. (2011) acknowledge factors like a country's objectives (political, economic and social), a country's constraints (geology and geography, structure of the economy, energy sources, institutional and regulatory framework, ownership and access to research and market regulations), and finally, exogenous elements (oil and gas price, economic cycle and international sanctions) as influencing the decision-making process that relates to the growth strategy.

Besides, Wainberg and Foss (2007) also played a significant role in providing insight into a number of these factors responsible for the outcome of the commercial and non-commercial objectives of NOCs, and specifically, NNPC. These critical factors prevail within and outside the business environment and overwhelm the management structure, decision-making process, and growth strategies of the NOCs. Wainberg and Foss (2007), categorised these factors into internal and external drivers. The internal factors include political organisation, revenue priorities for the host government, internal energy and material requirement, limited access to electricity in Nigeria, trade union and labour politics, regulatory framework, domestic civil society groups, and non-governmental organisations. The external factors include international strategies for regional and global markets; global supply-demand balances and commodity prices; goals and objectives of investors; minimum requirements of global markets; interaction between investors and regulators and finally, international civil society groups and other non-governmental organisations (Tordo et al. 2011; Wainberg and Foss 2007; Nwokeji 2007).

2.4.1 Key Internal Environmental forces and their impact on NOCs

The internal forces are domestic driven and to some extent, within the control of the NOCs (Wainberg and Foss 2007). Notable among these forces are political organisations like the government, revenue priority, regulatory framework, stakeholder (Akinola 2018; Akinrele 2016; Tordo et al. 2011). Based on the identified internal environmental forces impacting on growth strategies in NOCs, particularly the NNPC, Nigeria, this study conceptually presents these internal environmental forces for oil and gas industry analysis in figure 2.3 below: The elements of this figure are further discussed extensively in the section that follows.

Figure 4: Internal environmental forces

Source: Author Generated (Based on the synthesis of Akinola 2018; Akinrele 2016; Tordo et al. 2011; Victor et al. 2012; Inkpen and Moffett 2011; Tordo et al. 2011).

2.4.1.1 Political Organization (Government)

The decision regarding the establishment of NOCs takes place in the broader context of government intervention. Consequently, the influence of political organisations on the government cannot be over-emphasised in the oil and gas industry of the host nation. Although this is a political argument, any political benefit from state control usually comes at a cost (Tordo et al. 2011). According to Steven (2003), there are three key drivers that gave rise to the growing government involvement in the NOCs. This scholar opines that firstly, government involvement aims to create a mechanism for economic development. Secondly, participating in the international market that to mutual gain, and finally, assist in absorbing the considerable scale of revenue generated from the oil and gas products. This is because a country's domestic absorptive capacity is lacking, given the size of this revenue from oil and gas products.

On the contrary, the three fields of economic analysis challenge this assertion and viewed the stance from the construct of the economic theory of politics that focus firstly on evaluating the behaviour of political elites. Secondly, on the theories of public choice that centre on the analyses of the behaviour of bureaucrats, and finally, the principal-agent theory that examines the critical interaction between the political elites and the bureaucrats (Udehn 2002; Holmstrom and Milgrom 1991; Kalt and Zupan 1984; Buchanan and Tollison 1984). These schools of thought observe that government failure has a negative effect on the performance of the NOCs regardless of their investment in establishing the NOCs. The economic theory summarily explained that government involvement in NOCs centres on the solution to an imperfect market and the political ideology of government officials regarding the private ownership of particular assets. These scholars observe that elections provide the marketplace for votes in exchange for policies.

Nevertheless, the marketplace is highly imperfect since knowledgeable voters believe the impact of one single vote does not affect the final electoral outcome (Steven 2003). These politicians, once elected, acquire the exclusive authority to formulate policies and, as monopolies, distort the NOCs entire operations. This distortion, by extension, has a crucial consequence for decision-making that relates to growth strategy. Steven (2003), also points out that monopoly power gives the political elites limitless access to financial resources to fund their schemes. Similarly, pressure groups that deliver substantial votes during electioneering strongly influence political elites. This consequent lobbying grants the pressure groups some rewards. Nevertheless, it distorts the NOCs, the commercial and non-commercial objectives of the NOC being the sole provider of the fund to the government for electioneering projects.

Likewise, public choice theories focus on the behaviour of bureaucrats seeking to appropriate funds for their private use to the detriment of society, resulting in the inadequate and delayed provision of goods and services (Buchanan and Tollison 1984).

Finally, the principal-agent analysis critically evaluates information asymmetries between the political elites and bureaucrats and how the bureaucrats design policies that are mostly against the interest of political elites seeking re-election through tax mechanism to fund public services (Holmstrom and Milgrom 1991).

In conclusion, the government is apprehensive about securing access to the oil and gas industry, the lack of which threatens the socio-economic stability (Cuervo-Cazurra et al. 2014; Wainberg and Foss 2007). Nevertheless, this argument raises the question of the capacity and performance of the politically appointed bureaucrats that manage the NOCs. For instance, in Nigeria, the political elites and their appointees are directly involved in setting the strategic direction of NNPC. This aims to achieve their political objectives with little consideration for attaining NNPC's commercial and non-commercial objectives (Akinola 2019). These appointees are given top managerial positions with authority to undertake talent management functions such as recruitment and selection, deployment, promotions, amongst others (Akinrele 2016; Nwokeji 2007).

2.4.1.2 Revenue priority

The oil and gas industry faces immense political uncertainties on a global dimension that cause substantial risks to NOCs operations, which are difficult to manage (Gault 2012). These uncertainties impact government official decisions and processes that affect revenue maximisation, societal sources spurred by public interest groups that cause unrest, regional instability, and industrial agitations (Iankova and Katz 2003). Political uncertainties have negative economic, societal, and environmental consequences that hinder NOCs dual objectives and eventually threaten the stability of demand and supply in the oil and gas market (Correlje and Linde 2006). Revenue from oil and gas products are the primary sources of income for most oil and gas producing countries like Nigeria. The income from oil and gas products is deployed to cater to infrastructural development and subsidy mechanisms (Pascual and Zambetakis 2008; Correlje and Linde 2006). According to these scholars, economic uncertainties cause a reduction in oil and gas demand and, consequently, product price. Low oil and gas prices impact revenue maximisation and governmental political authority to accelerate economic and infrastructural development.

Similarly, low revenue lead to investment cut and prioritisation of national economic development. Pascual and Zambetakis (2008) observe that oil and gas producing countries' capacity to invest in oil and gas production and exploration activities will be affected by the need to allocate financial resources to other unrelated developmental projects by the government. This government decision raises the question of whether the NOCs can sustain their commitment to achieving both commercial and non-commercial objectives in response to environmental forces. In Nigeria, foreign exchange proceeds is remitted to the national treasury account for debt servicing, and the administration of three tiers of government stood at USD81.27 as of March 31, 2019 (World Bank 2019; CBN 2018). Akinola (2018) point out that Nigeria spends 50 per cent of the revenue generated from oil and gas sales on debt servicing. Consequently, the debt repayment burden and administrative cost of managing the three tiers of government impact NNPC's growth strategies due to the limited fund allocation for its commercial and non-commercial objectives.

2.4.1.3 Regulatory framework

The oil and gas industry has witnessed several regulatory reforms. The need for revenue maximisation, health and safety, environmental and climate change management, infrastructural development, the security of supply and demand triggered regulatory reform in the industry (Cole 2018; Sullivan 2017; Tordo et al. 2013; Al-kasim et al. 2008).

According to Hunter (2014), the extraction of oil and gas products essentially liquidates natural assets leaving behind a large amount of sterilised field that needs to be managed by the governments of oil and gas producing countries. The oil and gas endowed country is obliged to balance the extraction of oil and gas resources to the benefit of citizens while simultaneously creating a conducive environment for the oil companies to recover those oil and gas resources. According to Hunter (2014), to achieve a balance between these two competing interests, the country creates a policy and a legal framework to implement the plan. Nevertheless, Hunter (2014), observe that some regulatory frameworks are constitutionally uneconomical due to the regulatory burden, which significantly increases oil and gas extraction costs. This scholar asserts that this happens where these oil and gas resources are overwhelmed or exhausted; the required fee of recovering becomes uneconomical.

Other scholars opine that the oil and gas industry needs a sustainable regulatory framework that will mitigate against environmental disasters from occurring (Kvalheim and Dahl 2016). For instance, the Alpha Piper disaster in the United Kingdom, the tragedy in the Gulf of Mexico, and the Ogoni oil spillage in Nigeria (Anis et al. 2015). These scholars attribute these failures to regulatory concerns.

Consequently, top management needs to review existing frameworks and put into account disaster management in the industry.

On the other hand, Nigeria operates command and control regulatory framework akin to the regulation practised in the United Kingdom and the USA in the 1970s and 1980s (Ekhator 2016). Under this framework, regulators appear to be acting in the public interest. However, they are limited in their responsibilities due to over-regulation, red-tape, and ambiguity of the regulatory framework (Ekhator 2016). In addition, the Nigerian regulatory framework, including the Petroleum Act, the Land Use Act, Oil, and Pipeline Act, the Petroleum Act, Environmental Impact Assessment Act, amongst others were promulgated by the military regimes in the 1960s and 1970s. The military rulers in this era were customarily unitary in nature and tended to be socialist inclined (Ekhator 2016). Thus, raising the question about their suitability and effectiveness considering the dynamic business environment in which the oil and gas industry operates. These pending answers concerning the adequacy and effectiveness of this outdated legal framework informed the drafting of the petroleum industry bill (PIB) in 2003 (Akinrele 2016; Ekhator 2016; Emeseh 2006).

The NNPC remains limited in its domestic and international market due to the non-passage of the PIB (NNPC 2016). It is essential to note that the PIB was first presented to the National Assembly (NASS) for review and approval in 2003. Nevertheless, consent was denied by the president of FGN due to a lack of political will and the conflict of stakeholders' interest (Akinrele 2016). Subsequent administrations have not been able to pass the bill. However, the PIB was fragmented into the Petroleum Industry Governance Bill (PIGB), Petroleum Industry Fiscal Bill (PIFB), Petroleum Host Community Bill (PHCB) and Petroleum Industry Administration Bill (PIAB) in 2017 for ease of passage as advised by NASS in 2017 (Akinrele 2016; NNPC 2016).

Interestingly, the PIGB was eventually passed by the NASS in November 2018, though lacking presidential assent due to disagreement relating to the power-sharing and revenue allocation between the Niger-Delta communities and the government (Akinyele 2016). The actualisation of the PIB remains a subject of debate between the government, NASS, and other shareholders in the industry. Moreover, a review of past behaviour from the previous administration (2003-

2018) depicts the improbability of presidential assent of the PIB bills (Akinrele 2016). Thus, the timeliness and relevance of this study is in a bid to highlight the impact of the regulatory framework in the growth strategy of NNPC.

2.4.1.4 Stakeholder

Extant literature categorises stakeholder as internal and external environmental forces that influence organisation activities (Owolabi 2015; Witter et al. 2014; Inkpen and Moffett 2011). The impact of stakeholder is significant since every organisation, regardless of its size, operates within a myriad of relationships and devoting the required consideration to all the legitimate stakeholders involved is crucial to the achievement of the organisation's objectives (Laplume et al. 2008; Ruf et al. 2001; Gibson 2000; Argandona 1998; Donaldson 1995; Preston 1995; Freeman 1984). A stakeholder is a person, neighbourhood, natural environment, organisation, interest groups, or other bodies that hold a "stakes or influence" in the organisation's operational activities (Grant 2019; Brooks and Weatherson 2000; Thomson et al. 1991). Stakes, as defined by Collins English Dictionary (2011), is an "interest", often financial, held in something, for instance, in an organisation while "influence" is referred to as the effect of one person or thing on another, further illustrated as the power of a person or thing to have such an effect. Freeman (1984) categorises stakeholders into internal (owners, partners, employees, and investors) and external (pressure group, environmentalist, host community, the general public, and other businesses) based on their involvement in terms of a financial stake in the organisation or otherwise. The internal stakeholders have vested financial interest in the organisation's strategic process to achieve set objectives (Grant 2019; Brooks and Weatherson 2000). Contrary, the external stakeholders are based outside the organisation with no financial interest therein, nevertheless, are impacted by the organisation's activities directly or indirectly. (Grant 2019; Brooks and Weatherson 2000; Sternberg 2000; Morgan and Hunt 1994). Organisations respond to stakeholders for different reasons. Nevertheless, all are within the context of mutually exchanging interests and benefits for all the stakeholders based on their moral claim on the actions of the organisations (Kaler 2006; Coombs 2000; Grunig and Grunig 2000; Citrin and Green 1990; Freeman 1984). Managers in organisations are responsible for balancing and integrating these different stakes while aiming to achieve the defined objectives (Grant 2016). This is because stakeholder relationships as dyadic, mutually independent, transactional, and defined based on the interest and, as such, the need to manage all these interests, respectively (Emerson et al. 2011; Beach 2008; Friedman and Miles 2006; Pesqueux and Damak-Ayadi 2005; Bucholz and Rosenthal (2005); Bryson 2004; Daft 2003; Grunig 2000).

In addition, Hill and Jones (1998) believe that analysing who the stakeholders are, identifying their interest and how they act is fundamental to the organisation's success, especially in terms of stakeholders with the greatest importance for the overall organisational survival (Clarkson 1995). Grunig and Repper (1992) argue that there is a symbiotic linkage between stakeholders and the organisation. As such, there exist consequences for each other in terms of favourable or adverse outcomes. Likewise, Frederick (2006) opined that organisations and society enjoy symbiotic and interdependence relationships. Hence, a fundamental change in one brings a positive or negative movement for the other party. Thus, organisations and stakeholders are responsible for seeking mutually beneficial outcomes through this relationship mechanism.

Stakeholder Attributes

Stakeholder attributes provide a preliminary framework for understanding how stakeholders can gain or lose salience to managers in an organisation. According to Michell et al. (1997), these attributes (power, legitimacy, and urgency) are variables, socially constructed, consciousness, and wilful exercise may or may not be present. George and Jones (2008) define power as the ability of one person or group to cause another person or group to do something they otherwise might not have done. Salancik and Pfeffer (1974) also point out that it is the ability of those who have the power to bring about the desired outcome. Equally, Tawney (1931) asserts that the capacity of an individual or group is to modify the conduct of other individuals or groups in a manner which they desire and without having to change their behaviour in a way which they do not want. Mitchell et al. (1997) argued that power could be coercive (based on the physical resources of force, violence, or restraint), utilitarian (centres on materials and financial rewards), and normative (based on symbolic resources). These scholars further observed that power is also transitory; that is, it can be acquired as well as lost (Etzioni 1984).

According to Mitchell et al. (1997), the "possession of power does not necessarily imply its actual or intended use, nor the does the possession of power imply the consciousness of such possession by the possessor or correct perception of objective reality by the perceivers." An individual or group may possess the power to impose its desire upon an organisation. Still, unless it recognises its power and is willing to exercise it on the organisation, it is not a stakeholder with high salience for the managers vis-a-visa the stakeholder relationship. In essence, there exists latent power in stakeholder relationships. Nevertheless, this power does not guarantee high salience until it is triggered by conditions that manifest in the other two attributes of the relationship, that is, legitimacy and urgency (Mitchell et al. 1997); Suchmam (1995); Wartick and Mahon (1994); Hills and Jones 1992).

Legitimacy is another variable attribute of the stakeholder. Thus, it may be present or absent. Suchman (1995) views legitimacy as a generalised perception or assumption that the actions of an organisation are desirable, proper or appropriate within a socially constructed system of norms, values, and beliefs based on either the individual, organisation or society (Wood 1991). For instance, the perception that managers have of a stakeholder determines their interaction level, although this also depends on the two other attributes (power and urgency). Mitchell et al. (1997) point out that legitimacy gains rights through power and voice through urgency.

According to Mitchell et al. (1997), urgency is a socially constructed perceptual phenomenon and may be perceived correctly or wrongly by a stakeholder, the managers or other actors in the context of the environment. Wartick and Mahon (1994) define urgency as the degree to which a stakeholder's claims call for immediate attention based on time sensitivity (the degree of managerial delay in attending to the request) and criticality (the salience of the claims of the stakeholder). These scholars (Mitchell et al. (1997); Suchmam (1995); Wartick and Mahon (1994); Wood (1991) assert that urgency by itself is not sufficient to guarantee high salience in the stakeholder-manager relationship. However, high salience of urgency is attained when combined with at least another attribute or more. For instance, in combination with legitimacy, it promotes access to decision-making channels; when combined with power, it encourages one-sided stakeholder action. Finally, when combined with legitimacy and power, it triggers reciprocal acknowledgement and response between stakeholders and managers.

All these scholars identified stakeholders based on the class of power, legitimacy and urgency attributes in the relationship with the firm. Nevertheless, it is the managers of the firm who determine which stakeholder is salient and, thus, will receive management consideration in the organisation's strategic process (Mitchell et al. (1997).

- **Key Stakeholders in NNPC**

According to Akinola (2018), the group that have critical stakes in the NNPC, Nigeria include:

- The Federal Government of Nigeria (FGN/Presidency)
- Ministry of Petroleum Resources (MoPR),
- Directorate of Petroleum Resources (DPR)
- Petroleum Products Pricing Regulatory Agency (PPPRA)
- Petroleum Equalization Fund (PEF)
- National Petroleum Investment Management Services (NAPIMS)
- Duke Oil Limited
- National Assembly (Upper and Lower House of committees on oil and gas industry)
- Multinational and Indigenous Oil and Gas Companies (Shell, Total, ExxonMobil, Addax Petroleum, Chevron, Schlumberger, Elf, Statoil, Halliburton, Intels, Devon Petrogas, Nexen, Hardy Oil and Gas, ConocoPhilips, Conoil, Eni (Saipem)
- Nigerian Liquefied Natural Gas Limited (Nigeria LNG)
- Indigenous Integrated Oil Companies (Oando, Sahara Oil, Nestoil, Seplat Petroleum, Forte Oil, Amazon Energy, MRS Oil, Chibeco Oil).
- Other stakeholders include host communities, non-governmental organisations, and finally, the pressure groups.

According to Uwafiokun and Uwem (2006), the FGN remains the main key stakeholder by decrees and laws such as the Land Use Act of 1978 and 1969 Petroleum Act (NNPC 2018; Nwokeji 2007). FGN is the only legitimate authority to conduct contractual negotiation and grant concession to any multinational and indigenous oil and gas company in Nigeria. This legitimate authority is because the FGN owns the land, and everything therein (oil and gas products) is vested in the Nigerian state (NNPC Act 1979). The FGN manages all oil and gas contractual transactions and partnerships in Nigeria (Akinyele 2018). The oil and gas management is conducted directly through the presidency or oil and gas-related agencies like the MoPR, NAPIMS, DPR, PPPRA, PEF PTDF, amongst others (NNPC 2018). The FGN also performs regulatory functions through the DPR, NAPIMS, and NNPC on all Nigeria's oil and gas industry activities. In essence, NNPC is an FGN proxy in the oil and gas business in Nigeria. It holds between 23% to 49% in all the joint ventures partnership arrangements with multinational oil and gas companies within Nigeria's oil and gas space (NNPC 2018; Akinrele 2016; Nwokeji 2007; Uwafiokun and Uwem 2006). The NNPC is the chief superintendent in the sector, setting the strategic direction for all Nigeria's oil and gas industry activities. FGN is definite is a stakeholder with the attributes of power, legitimacy, and urgency in NNPC and the entire Nigerian oil and gas industry (Mitchell et al. 1997).

Other internal forces with significant impact of NNPC’s growth strategy and profitability include communication and role of human resources.

2.4.1.5 Communication

Communicating messages and ideas is the core of any human interaction (Keghku 2005). The presence or absence of communication largely affects the success or failure of such human interaction. According to Robertson et al. (1993), communication is a relevant element in organisational change and development because the effort of an organisation to improve the attitude and behaviour of individual employees to achieve the desired outcome is organisational change. On this note, Daly et al. (2003) point out that internal communication involves the transfer of information by the management to the other employees and feedback and suggestions sent to management directly or through the team representatives. According to Daly et al. (2003), this communication prevents resistance to change while preparing employees for change (Armenakis and Harris 2002), which stimulates growth if adopted in the early stages of organisational decision-making. Communication is the only channel through which this is achieved. Receiving suggestions on expected tasks and behaviour to meet a target for growth and profitability depends on the change the individual behaviour in order of its employees. It requires parties to be in tune with each other concerning meaning sharing. Niraula (2012) states that effective communication entails an understanding among a person or group.

Traditionally, communication was routed around five key elements: sender, message, medium, receiver, and feedback. Keghku (2005), however, examines eight credits for an effective communication process. The first focus is on the content of the communication. It is expected that the message must have relevance and meaning to the targeted recipients. The content should be adequately woven in a context understandable by the recipient, taking into cognisance the different environments of individuals or groups. The capability of the target audience to understand a communication message is essential.

Furthermore, intellectual abilities, demographic, background, experiences and prior knowledge of the subject must be considered when designing a communication message (Niraula 2012; Keghku 2005). The communication process can easily achieve its aim when built around the receiver's emotion. This builds bridges between the sender and receiver. Messages must be distinct and emotional in appeal before turning into logical reality. The delivery of the message must be simple. Clarity penetrates and convinces. The language of message delivery should be devoid of complex meanings to avoid misunderstanding. Building credibility is vital in the communication process. The sender of the message must build confidence by being honest and transparent. Messages on specific subject matter must be straightforward, sincere and true. A message delivered in a continuous and consistent manner can create and reinforce trustworthiness on both the sender and receiver of the message (Dirks and Ferrin 2001). The message must get to the receiver through the appropriate medium (Lewis 1999). Choosing the wrong media mixture (face-to-face or mass media) may lead to the inability of the message to reach the target audience.

The world economy has witnessed unprecedented changes with the growth and expansion of businesses and organisations across the globe. The working environment for most outlets is going corporate with less emphasis on community and interpersonal relationships. Thus, managing the communication process for corporate entities involves the internal coordination of individuals within the organisation. Bucata and Rizescu (2017) assert that the management of organisations heavily relies on the process of communication to coordinate its business activities, make decisions, formulate policies and implement them. From

the management point of view, communication involves informing employees and guiding them to achieve the best results.
However, sustaining a corporate identity for an organisation both among its staff members and the external public according to Akinyele (2012) is a function of a good communication process. It is the element that maintains and sustains relationships. Communication promotes motivation by informing and clarifying the employees in an organisation of the task to be done (Akinyele 2012). This scholar further points out that communication states the rationale for performing the task and how to improve performance. This is further stressed by Bucata and Rizescu (2017) who hold that communicating effectively means putting your thoughts in order and presenting them in an accessible way, but also expressing them in a way that would capture the attention of the receiver. Communication makes possible the interaction between members of the working team.
A seamless communication process is a win for any corporate entity. Guru et al. (2013) posit that good corporate communication in an organisation effectively reaches all its stakeholders who can both be the internal public (employees and investors) and the external public (suppliers, financiers, consumers, government officials, media professionals, local community, etc). An organisation needs to convey the same message to all its stakeholders in order to transmit coherence, credibility and ethics. If one of these points is broken, the whole community can make this organisation disappear. The corporate communication area will help this organisation build its message, combining its vision, mission, and values and supporting the organisation by communicating its message, activities, and practices to all its stakeholders.
The pace of transformation of many industries in terms of internal operations and their relationship with the outside environment has largely been occasioned by the increased availability and use of information resources (Stacho et al. 2019). This according to Stacho et al. (2019) presents an opportunity to bring many benefits as well as many more risks if not properly harnessed. If managed well, they have the potential to give rise to innovation that will drive growth and social impact. If not handled appropriately, challenges such as the rising threat of cyber-attacks that expand into the physical world, privacy issues, and the polarising effects of technologies on labour markets could derail these benefits. The seemingly low utilisation of communication prospects has been experienced in the Nigerian oil industry, which happens to be the country's largest revenue earner. These, in

many instances, have derailed accruing benefits. The free flow of communication in an organisation enhanced by technology brings flexibility and speed, thus enabling product personification, effective production, and more efficient control. To improve competitiveness and performance, corporations must embrace advancements in digitalisation (Stacho, Stachová, Papula Papulová, and Kohnová, 2019). This encourages collective meaning sharing at all levels within the corporate entity. The open exchange of information is a hallmark of the growing knowledge economy.

However, the problem is that while the ability of effective communication is one of the key abilities in identifying talented employees, significant deficiencies are frequently reported in the level of organisational communication itself. Many organisations have an innovation strategy with clearly set factors and principles, but line managers have limited information about it. It is then implemented only very slowly, without producing requested outcomes for the organisation. Ali et al. (2019) argue that knowledge sharing encourages learning and transfer of expertise knowledge, and skills, thus reducing the negative effect of high staff turnover within an organisation, preventing loss of knowledge as a result of retirement, and enhancing performance as a result improved knowledge. Overall, knowledge sharing emanating from communication can reduce outsourcing, increase competitive advantage and enhance organisational growth and profitability (Barney 2002; Witherspoon et al. 2013). Hence, the role of communication as an internal environmental force affecting growth strategy and profitability in the NNPC will be explored.

2.4.1.6 Human resource management

The deployment of the communication process ultimately functions better with a well-coordinated human resource management of any organisations. Aoin (2017) looks at human resource management as the process that "deals with several operational objectives such as recruitment and selection, training, employee assessment, welfare administration, motivation and maintaining a proper relationship with the employee in the organisation through laws created by the concerned state and country. Human resource management is a process through which the organisation utilises their limited skilled workforce. The main intention is to make effective utilisation of the existing human resource for the organisation".

Human resource management works in a variety of ways but all is geared towards a harmonious working environment. Itika (2011) explains how human resource functions for the overall good of the organisation. Foremost of it is the establishment of organisational structure which is put in a way that will enable the realisation of the intended mission, vision, goal, objectives, strategies and tasks. It also functions as a process of allowing the organisation to have the right people doing the right jobs at the right time. It coordinates all the spectrum of human resources such as recruitment, selection, placement, promotions, transfers, and downsizing. Another function of human resource management is managing performance appraisal, which initiates the system, process, techniques and tools of individuals, teams and organisational performance measurement. It has to ensure that performance targets for individuals, teams, sections and departments are set and agreed upon and measures to address performance gaps are in place and are working. This can be achieved through staff training and development. Since the performance of the organisation depends on the competence of the workforce, training and development are important, not only for the present job but also for a future job and the organisation. Compensation and reward management of employees are other ways which enable the organisation function. It is the duty of the human resource department through the responsible officers to evaluate different types and levels of jobs in order to develop appropriate compensation or reward in terms of pay and other incentive packages. Human resource management also functions to ensure smooth relationships between an employer and employee and among employees in the workplace to avoid conflicts and disputes, which will ultimately lead to unproductive behaviour. Other routine human resource management functions are a myriad of other personnel functions, which are basically routine work and constitute day-to-day administrative activities performed by personnel officers depending on the size and scope of the organisation. These functions include but are not limited to, health, transport, security and safety, pensions, death, and personnel information systems.

Regardless of the noted internal environmental forces that influence the entire operations of the NNPC, growth strategy included, there are other critical external environmental forces with significant impact requiring the attention of the top management in the pursuit of the attainment of the commercial and commercial objectives. These forces include communication and role of human resources.

2.4.2 Impact of External Environmental Forces on NOCs

External environmental forces are internationally driven and are beyond the command of top management as discussed in section 2.1.1. Nevertheless, these forces interact with organisations, thus causing unknown changes that require a response (Wainberg and Foss 2007). The uncertainties involved in identifying and proffering solutions to mitigate against the impact of external environmental forces on the organisations, especially NNPC's operations. These external environmental forces constitute a challenge to top management in the context of growth strategies, as discussed in sub-section 2.1.1 (Key external environmental forces).

These external environmental forces impact the commercial and non-commercial objectives of the NNPC, by extension, their growth strategies, organisation structure, operations, and long-term sustainability. Specifically, the impact is critical in emerging economies such as Nigeria. This is due to Nigeria's weak regulatory framework, innovation and technological gap, and public mismanagement (Ahmad et al. 2017; Steven 2016; Tordo et al. 2011; Eller et al. 2010: Woof 2009). Nevertheless, several of these environmental forces also pose opportunities for the NNPC to secure their commercial and non-commercial objectives through the application of varieties of management practices and the reshaping of growth strategies in response to the impact (Al-Fattah (2013). However, empirical evidence shows that the required management practices and growth strategies are lacking in NNPC (Akinola 2018; Akinrele 2018; Nwokeji 2007). Accordingly, this study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability.

2.5 Country of Study

Nigeria is a sub-Saharan country in Africa, with massive known oil and gas reserves (World Bank 2019; Akinrele 2016; Nwokeji 2007). The abundance of oil and gas reserves led to the establishment of the NNPC in 1977 by the Federal Government of Nigeria (FGN) through the 1969 Petroleum Act (NNPC 2018;

Nwokeji 2007). Nigeria occupies an area of 923,768 km^2. The country has over 37 billion barrels of petroleum reserves, with a population of over 202 million as at May 2021 (World Bank 2021). This population accounts for about 47% of West African people. The country has 36 states and Abuja as the federal capital and the nation's administrative headquarters. The society is multi-ethnic and culturally diverse, with over 520 languages spoken (World Bank 2019). Nigeria returned to democracy in 1999 and held a national election, which was won by the re-elected incumbent president, Muhammadu Buhari, in 2015. The President's cardinal focus includes fighting corruption, managing unemployment, diversifying the economy, and reducing insecurity in all the volatile regions of the country (World Bank 2019). According to the World Bank (2019), the Nigerian economy comprises the oil and gas industry and the non-oil and gas industry. The non-oil and gas industry is weak, accounting for almost a quarter of the unemployed workforce in 2018 (World Bank 2019).

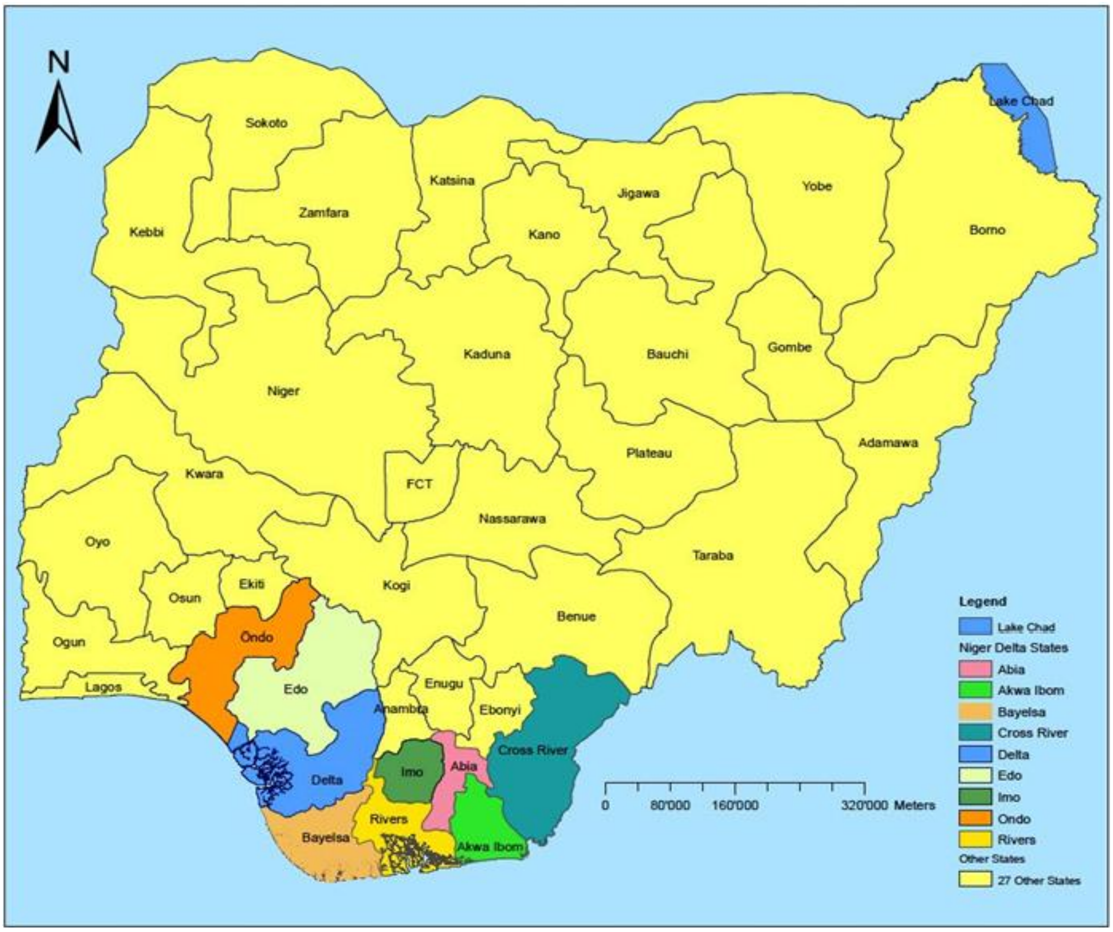
According to the US Energy Information Administration (EIA) (EIA 2016), the economy and population depend solely on the revenue from the sales proceed of oil and gas products. This dependence constitutes an economic risk and causes budgetary distortion because of the impact of environmental forces (Akinola 2018; Amadi 2010; CBN 2018; PWC 2018). The Nigeria oil and gas reserves found in the Niger-Delta region is a source of conflict between the host communities and other key stakeholders seeking a share of the oil and gas industry products for their regional and socio-economic development (NNPC 2018; PWC 2018; EIA 2016).

This oil and gas-producing region (figure 2.4) is also affected by inadequate infrastructural development, oil spillage, natural gas flaring, and ineffective environment management (EIA 2016). The activities of the petroleum companies in this region coupled with regional conflicts and climate change are attributable to the air, land and water pollution that lead to loss of arable land and decrease in life and fish stock which is the mainstay of the inhabitants of the Niger-Delta (Oyewunmi and Olujobi 2016; EIA 2016, Nwokeji 2007). The oil and gas production and exploration activities create persistent disturbances, economic and social inequality, and political unrest in this Niger-Delta region (World Bank 2019). These oil and gas production and exploration activities have further resulted in undermining governance and service management by companies involved in the Nigerian oil and gas industry in the Niger-Delta region, as observed by PWC

(2018); KPMG (2018); Akinrele (2016); EIA (2016); Victor et al. (2012); Nwokeji (2007).

Figure 5 below is a map of Nigeria, showing the oil-producing states situated in the Niger-Delta region

Figure 5: The oil-producing states situated in the Niger-Delta region of Nigeria.



Source: Ite et al. (2013).

2.5.1 Nigerian National Petroleum Corporation (NNPC)

The NNPC is an integrated national oil company established to deliver commercial and non-commercial objectives (Akinrele 2016). Nevertheless, it is not immune to the impact of environmental forces, e.g., political, technology, regulation, competition, talent gap, government interference, amongst others (Akinrele 2016; Nwokeji 2007).

NNPC core responsibilities include the supply of oil and gas industry products like petroleum, liquefied petroleum gas, liquefied natural gas, propane, butane, fuel oil, gasoline, kerosene, and diesel for domestic and global markets (NNPC 2018). According to Omeje (2017), NNPC encounters the persistent task of balancing commercial and non-commercial objectives, such as profit maximisation and national socio-economic growth. The challenge of balancing these objectives are attributable to factors such as lack of a clear policy framework and implementation mechanism, government interference in NNPC's operations, lack of accountability and transparency, NNPC's organisational structure, an outdated regulatory oil and gas industry framework, disputes over owner ownership claims between the government and host communities, the non-passage of the PIB, the subsidy regime, and the privatisation debate (Akinola 2018; Victor et al. 2012; Tordo et al. 2011; Oyewunmi and Olujobi 2011; Omenikolo et al. 2010; Moller 2010; Amadi 2010; Nwokeji 2007).

Consequently, these observed environmental forces hinder the complete optimisation of the oil and gas resources and national wealth creation by NNPC. This is akin to the resource-curse syndrome (Loung and Weinthal 2001; Akinrele 2016; Oyewunmi and Olujobi 2011; Nwokeji 2007). Similarly, Akinola (2018) claim that NNPC cannot convert oil and gas resources into wealth for ordinary citizens. These scholars attribute this perennial inability to critical forces, such as government interference, lack of accountability and transparency, NNPC's organisational structure, and finally, the forces of demand and supply often trigger crises in the oil and gas industry (Akinrele 2016; Oyewunmi and Olujobi 2011; Nwokeji 2007).

All these environmental forces, by implication, impact on the ability of NNPC's top management to formulate growth strategies aimed at the attainment of the organisation's commercial and non-commercial objectives. Although measures have been drawn out towards restructuring NNPC by several administrations to make it commercially viable, these plans are yet to be actualised by any government (Akinrele 2016; Victor et al. 2012). Regardless of the impact of all the environmental forces, the revenue generated by NNPC remains a cardinal contributor to the Nigerian economy, though inconsistent (NNPC 2018; Akinrele

2016; Oyewunmi and Olujobi 2011). Nevertheless, this revenue still accounts for more than half of the gross domestic product, over 85% of national revenue, and 95% foreign exchange earnings. This revenue is credited to the government treasury account deployed to debt servicing and the administration of three government tiers: the federal, state, and local governments (World Bank 2019; CBN 2018). Indices from other revenue sources like agriculture, information and communication, manufacturing, and others do not reflect the ability to measure up to the revenue earnings from petroleum products (CBN 2018; NBC 2018). The revenue from the oil and gas products remain the mainstay of the economy from its inception (1956) to date and even in the future based on the mono-economy status of Nigeria and the increasing global demand for oil and gas product (World Bank 2019; Akinola 2018; CBN 2018; DPR 2017; Inkpen and Moffett 2011). However, over-reliance on revenue from the oil and gas industry poses a socio-economic risk. Considering that NNPC is yet to proactively key into the opportunities inherent in the oil and gas industry reforms aimed at making the industry commercially viable (NNPC 2018; CBN 2018; DPR 2017). These reforms partly focus on transiting the industry from fossil fuel into other alternative substitutes. For instance, NNPC established the renewable energy department (RED) in 2015. Nevertheless, there is limited engagement in respect of a renewable energy source such as wind, solar, geothermal, and hydro-water in Nigeria (World Bank 2019; KPMG 2018). Akinola (2018), relates this limited discourse to frequent leadership change, the ambiguity of business focus, and the skillset set gap (Akinrele 2016).

In the same way, the influence of stakeholders before the 1980s in the Nigerian petroleum industry was insignificant (Oyewunmi and Olujobi 2011; Omenikolo et al. 2010). Hence, it was easier for the NNPC to predict the outcome of their growth strategies. On the other hand, beginning from the early 1990s, the stakeholder influence became very significant in the petroleum industry (Omeje 2017). For instance, stakeholders like the host communities and interest groups in the petroleum-producing regions are now aware of environmental degradation, which is linked to the activities of petroleum companies (Omeje 2017; EIA 2016). This awareness comes with an implication for all industry players. For instance, for any organisation to achieve a positive balance in its relationship with the environment where there operates, an effort must be made towards identifying key stakeholders and the impact of their influence on the organisation (Faleti 2010). Consequently, the study will identify the key stakeholders and the implications on NNPC's growth strategy amid their rising power.

2.6 Conclusion

This chapter identified environmental forces that present an opportunity for critical studies and an understanding of their impact on NNPC's growth strategies in order to respond with a practical policy solution. This chapter is informed by the research aim identified in chapter one, the research objectives, and the rationale of study. The chapter attempts to examine environmental forces and their impact on growth strategies in the oil and gas industry, and especially, NNPC Nigeria. Insight into the structure of the oil and gas industry was also provided, while identifying the key players in the oil and industry. A brief overview of the country of study and the NNPC is provided in this chapter.

Accordingly, the next chapter will examine the analysis of the comtemporary strategic management field and position the study within that space. Accordinglyly. References will made to the concept of strategy, growth strategy, strategic management, strategic planning and organisational change and models in response to identified environmental forces that shape the strategic direction of NNPC being the focus of the study.

CHAPTER THREE

Analysis of the Contemporary Strategic Management Field in response to the Impact of Environmental Forces in NNPC

3.0 Introduction

The literature provided in Chapter 2 highlights the critical environmental forces in the oil and gas industry. The Chapter also highlights the interaction between major industry players: - International Oil Companies (IOCs), National Oil Companies (NOCs) and the environmental forces that influences the attainment of commercial and non-commercial objectives within the context of growth strategy.

This Chapter 3 is an extended literature review chapter that focuses on analysis of the contemporary strategic management field that shape the strategic direction of an organisation, particularly NNPC. The overlap of strategy, strategic change management, strategic planning/organisation change and the environmental forces that ultimately influence the attainment of the commercial and non-commercial objectives of NNPC, are extensively discussed. This literature review chapter also comprehensively examined and identified the key debates in strategic management, strategic management in the public sector, strategy frameworks and tools, strategy implementation, change management models, growth strategies in response to the impact of these environmental forces in the oil and gas industry, specifically, NNPC Nigeria.

3.1 Review of the Strategic and Change Management Literature

The concept of strategy relates to business models as scholarly observed by Casadesus-Masanell and Ricart 2010; Chesbrough 2010; Teece 2010. These scholars argue that all businesses have business models that state the architecture (content, structure, and governance) of the value creation, delivery and capture mechanism that the company is based upon. This implies that the business model mirror management hypothesis about what customers want, how the customers want it, what the customers are willing to pay and finally, how the enterprise can organise resources to best meet the customer needs, want, get paid for the rendered service or product (Casadesus-Masanell and Ricart 2010; Chesbrough 2010; Teece 2010). This scholarly submission aligns with Zott and Mit (2010) claim that a firm's business model is a system of interdependent activities that transcends the focal firm and span its boundaries. Although there are elements of relatedness between business model and strategy, Casadesus-Masanell and Ricart (2010) conceptual framework separate the concept of "strategy" and "business model". According to Casadesus-Masanell and Ricart (2010) business model refers to the logic of the firm, the way that the firm operates, and the way value creation is created for its stakeholders. By contrast, strategy involves designing business models (and redesigning the models as contingencies occurs) to allow the organisation to achieve its set goals (Casadesus-Masanell and Ricart 2010). Accordingly, it is right to state that strategy is a critical component of an organisation's success leveraging on these scholarly assertions.

Notwithstanding the overall concept of strategy as critical for the success of an organisation and the endorsed option by decision-makers who contemplate that detailed plan as inapplicable, there is no forthright definition of strategy (Wit and Meyer 2014; Barney and Clark 2007; McGahan 2004; Barney 2001). Nevertheless, the concept of strategy has its antecedents in the military and political spheres where the focus was on winning warfare. This assertion relates to both Hart (1982) and Ferrill (1966), where the Greeks, led by the Spartans, fought and conquered the much more numerous Persian armies by a superior military strategy. This means that the concept of strategy is embedded in winning.

Kornberger (2013) asserts that strategy does not represent a body of knowledge about how to manage and master future conflicts successfully. However, top management in organisations deploy strategies to create aims and objectives, understand the environment, appraise resources and implement effectively to achieve set goals (Clegg et al. 2017; Grant 2016; Lampel et al. 2014 Chandler 1962). According to Chandler (1962), as cited by Teece (2010), strategy is a structural process that focuses on the determination of the primary long-term goals and objectives of an enterprise. Chandler (1962) also acknowledges strategy as a response mechanism to pressure triggered by environmental forces such as needs created by population growth, technological innovation, market dynamics and changing national income. However, Teece (2010) observes that strategy goes beyond the context of Chandler's definition, pointing out that strategy entails coherent and consistent decisions, coordinated resource allocation and theories of action (outcome and response) that decision-makers deploy to help indirectly achieve a goal unattainable by direct intervention. Similarly, Capon (2008) asserts that strategy is concerned with understanding the external environment and the required resources to compete either locally or globally. Hence, this study measured the appropriateness of growth strategies adopted by the NNPC in terms of the proportionality of the strategy to the available resources (financial and human resources) and the continuous improvement over time in response to the trends and environmental forces in the industry.

To summarise, these scholars view strategy as a process used by an organisation to achieve viability in the marketplace regardless of any competitor's actions, changing customer behaviour and response from rivals. In support of this notion, Rumelt (2009) points out that strategy is associated with internal and external environmental diagnosis, policy response and rational action by decision-makers aimed at achieving set objectives. Likewise, Grant (2016) views strategy as a pattern that integrates the firm's main goals, policies and action sequences into a cohesive whole (Lampel et al. 2014). Furthermore, Johnson et al. (2018) view strategy as the long-term direction of an organisation. For the purpose of this study, this definition provides a holistic understanding of strategy in the context of evaluating NNPC's growth strategy. The long-term perspective includes both strategies that focus on differentiation, competition, cooperation and finally, imitation strategy aimed at achieving set objectives and in the case of the NNPC, both commercial and non-commercial objectives (Johnson et al. 2018). Strategy can also be viewed from an action perspective. Johnson et al. (2018), argue that strategy-in-action focuses on how strategies are formed and implemented. These scholars identified three practical issues that relate to managing strategy in action. These issues are: "structuring," "systems," and "leading strategic change." "Structuring" is concerned with the arrangement that outlines how certain activities are coordinated to support a successful performance. For instance, roles, rules, responsibilities and information flow. "Systems" describe the structure required for the implementation of strategy — for instance, the planning and performance system. "Leading strategic change" is a critical component of strategy in action. "Leading strategic change" is concerned with how the change is led, the speed and comprehensiveness of the change impacting the organisation (Johnson et al. 2018). Considering these issues can lead to the formulation of effective strategies that will enhance long-term sustainable growth and development.

Jarzabkowski et al. (2007) view strategy from the practical application perspective, where strategy is conceptualised as a situated, socially accomplished activity while strategising comprises action, interaction and negotiation by multiple actors and the situated practices that are drawn upon to achieve the activity. Accordingly, justifying the element of change management models to examine the action or inaction of those that set the strategic direction of NNPC. Burnes (1988); Pettigrew (1988); Whip and Clarke (1986) believe that a combination of strategy and change, with strategic change as a continuous process leads to organisational growth and positive response to other environmental forces affecting the oil and gas industry. Lewin (1951) views change from the planned approach. He asserts that an organisational change process emerges as a movement in an equilibrium state towards the desired position. The equilibrium position is driven by higher forces in favour of change or forces against the change process. Gilgeous (1997), echoing this view, describes change as a response driven by a significant threat or opportunity within or outside the organisation. Canales (2014) aligns with these views by stating that the genesis of strategy making is revolutionary driven and emerges from autonomous and influenced behaviours as a result of critical interaction between the drivers of a firm. According to Ansoff (1957), the nature of an organisation is defined by its strategy, with a focus on formulation, as against the implementation of strategy. This is contrary to Poister's (2010) assertion that strategy implementation is as important as the formulation process to achieve effective and sustainable change.

Nevertheless, Ansoff observes that strategy is a planning process and categorised strategy into three distinct levels, e.g., functional, business and corporate. The functional strategy is concerned with the direct operational activities of an organisation, while the focus of the business strategy is concerned with the maximisation of the efficiency of the direct production process (Clegg et al. 2017). However, corporate strategy is concerned with the scope of the firm and the relationship that the organisation has with the environment where it operates (Clegg et al. 2017; Nag et al. 2007). Decisions concerning resource allocation and competition (identifying competitors and decisions on whether or not to compete) are made at the corporate level (Inkpen and Moffett 2011). For instance, in the oil and gas industry, the decision about whether NOCs should compete internationally or nationally is referred to as corporate strategy. This study centres on the premise of analysing the corporate strategy in the NNPC, given that decisions relating to product development, market penetration, market development and diversification are corporate strategy driven (Asrilhant et al. 2004; Ansoff 1957). Based on the above assertion, it was concluded that the decision on the strategy adopted and considered for adoption in response to environmental forces by the NNPC is also corporate strategy driven (Asrilhant et al. 2004; Ansoff 1957). Hence, the need to analyse significant factors influencing the process of strategy formulation and implementation in NNPC.

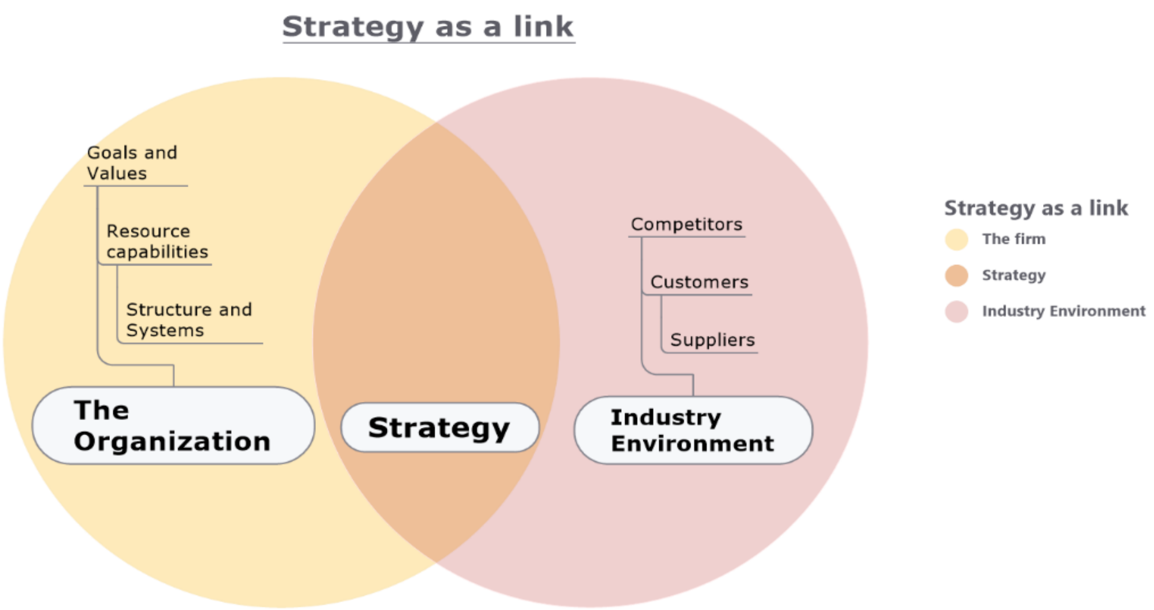
Inkpen and Moffett (2011) argue that a relationship exists between the corporate and business level strategy. The business-level strategy captures the decision of choices and tradeoffs on whether to compete in a particular industry or business. Crucial elements of the business such as the strategic objectives of the organisation, scope of the business and finally, the need for business distinctiveness from competitors guides this decision process. For instance, the IOCs, such as ExxonMobil, Shell, British Petroleum, compete in arrays of businesses within the segment of the value chain system: Upstream, downstream, and Midstream. However, each segment deploys its distinct competitive strategy to achieve its set objectives (Inkpen and Moffett (2011). Collectively, the arrays of choices of respective businesses of organisations inform the corporate strategy designed by the decision-makers to achieve the set objectives.

In addition, Wit and Meyer (2014) opine that the strategy process is concerned with the how, who and when of strategy. The "how" refers to how strategy is formulated, implemented, reviewed and monitored. The "Who" centres on who is involved in the strategy formulation and "when" concerns the time-frame for the strategic activities to occur. Dyson et al. (2007) note that strategic process envelops the management process that informs, shapes and supports the strategic decisions confronting a firm. This definition note strategy formulation and implementation as an integral activity that every company regularly employs to achieve set objectives based on the understanding of the competitive environment in which the organisation operates.

In summary, this thesis set to identify strategic issues in the NNPC and argues that applying the appropriate strategic elements to the overall process of decision making, in response to the perceived impact of environmental forces, will lead to the achievement of the organisation's commercial and non-commercial objectives.

Furthermore, Grant (2016) establishes that the strategic process is how top managers in an organisation analyse and understand the competitive environment, formulate clear, consistent long-term goals, undertake an objective appraisal of resources and carry out effective implementation to achieve the set objectives. This definition of strategy highlights the significance of critical analysis of the environmental forces that determine how the NNPC can achieve its commercial and non-commercial objectives through its growth strategy. Grant (2016) further reworked these four identified elements of successful strategy into two categories, namely, the organisation and the industry environment with strategy forming the crucial link, as shown in figure 6: Strategy as a link.

Figure 6: Strategy as a link.



Source: Author generated based on analyses of Grant (2016).

The organisation incorporates three of the elements: Goals and Values ("clear, consistent long-term goals"), the resource and capabilities ("objective appraisal of resources") and finally, structure and systems ("understanding of the competitive environment") as defined by the organisation's relationship with industry competitors, customers and suppliers. Grant (2016) argues that a strategy lacking consistency in the formulation and implementation process leads to organisational failure. Thus, the appropriateness of NNPCs growth strategy in response to environmental forces was also analysed in terms of consistency between the strategy and the long-term goals of the corporation and the challenges facing the oil and gas industry.

Strategy as a link between the organisation and the competitive environment indicates a strategic fit. Strategic fit focuses on an organisation's effort to maintain consistency between its strategy, the long-term goals, values, resources and capabilities of the organisation while utilising the opportunities inherent in the external environment. The stance of strategy as a critical link between the organisation and the environment demonstrate some semblance with the analytical tool known as SWOT (Strength, Weaknesses, Opportunities and Threat). Nevertheless, the recast of the elements into two categories of internal and external factors is preferable to the SWOT analytical framework typified by four elements, as observed by Grant (2016). However, the degree to which an organisation deploys its resources within its competitive environment to achieve the long-term goals and how to implement its strategy remains a task for top management, especially in the NNPC. This task is further compounded by the observed gap underpinned by government interference in the organisation's operations and weak regulatory institutions, which the SWOT analytical framework did not capture (Akinola 2018; Akinrele 2016; Inkpen and Moffett 2011).

Similarly, Porter (1991) points out that strategy is forming a unique and differentiated position that entails a different set of activities. The crucial factor is how these various activities fit coherently to develop a consistent and cooperatively reinforcing entity. Porter deploys Porter's 5 Forces framework. This framework considers the industry's attractiveness and profitability while focusing on the factors of the bargaining power of customers, the bargaining power of suppliers, the threat of a new entrant, the threat of a substitute for the products and the intensity of competitive rivalry (Clegg et al. 2017; Grant 2016).

Nevertheless, the suitability of Porter's 5 Forces framework in this thesis is limited because of its incompatibility with diversified organisations, especially in the oil and gas industry that operates in a complex environment and market interrelationship (Clegg et al. 2017; Grant 2016; Inkpen and Moffett 2011). For instance, interference from the government in the oil and gas production activities is another crucial factor missing in Porter's 5 Forces framework.

Another analytical framework for understanding the strategic process is the Resource-Based View (RBV). Barney et al. (1991) argue that organisations' continuous quest for competitive advantage is influenced by the resource base and the capabilities controlled by the organisation. e.g., resources that are "valuable", "rare", imperfectly imitable" and "not substitutable". Similarly, Johnson et al. (2014) describe RBV as the potential a firm has that contributes to the growth of the firm and makes it competitive in the industry (Ferreira et al. 2011; Barney 2007; Crane and Bodie (1996). The resource consists of human capital, management skills, organisational process, information, knowledge, routines, financial capability, materials, amongst others (Barney 2007). RBV aims to achieve sustainable growth by creating value for the consumer and being supported by the firm's management. RBV recognises that each organisation possesses a unique collection of resources and capabilities. Thus, exploiting these differences to achieve its set objectives is the focus of this model (Johnson et al. 2017; Clegg et al. 2017). However, Johnson et al. (2014) argue that resource availability and competence do not guarantee the attainment of set objectives. Rather the critical interaction between systems, processes, people and innovative capabilities in dealing with the market are variables that impact achieving set objectives.

The resources of the NNPC include technology, organisation structure, human capital, management, leadership skills, organisational process, information, knowledge, routines, financial capability, facilities, amongst others. Accordingly, decisions relating to NNPC's growth strategies are influenced by the resource base.

The Ansoff matrix complements these creative approaches given their limited application in strategy formulation, implementation and evaluation (Hussain et al. 2013). The Ansoff matrix is a decision-making model suitable for studying growth strategies in a dynamic business environment like Nigeria. The Ansoff matrix deploys the four vectors of market penetration, product development, market development and diversification to managing a business for profit economic consideration (Sajjad et al. 2013; Ansoff 1957). The four vectors of the Ansoff matrix are shown in Table 3 below.

Table 4: The Ansoff Matrix

Products

Existing New

Market Penetration • Consolidation • Protect/Build	**Product Development** • With existing capabilities • New capabilities • Beyond current expectation
Market Development • New segment • New territories • New uses • With new capabilities • Beyond current expectation	**Diversification** • With existing capabilities • New capabilities • Beyond current expectation

Existing

Market

New

Source: Ansoff 1957. P.394)

Growth is essential and can be explained through the Ansoff matrix (Sajjad et al. 2013). Nevertheless, the Ansoff matrix fails to recognise that market development and diversification strategies require a response to changing environmental forces (Hussain et al. 2013). Similarly, the Ansoff matrix is a model that provides a broad view of internal steps required to gain competitive advantage but is limited in the context of activities of external competitors (Patrick 2015; Hussain et al. 2013).

Although these concepts identify some factors of environmental forces from a practical approach in management, e.g., regulations, technological innovation, population growth, amongst others, it neglects the strategy formulation and implementation (context, content and process) perspective of the study.

Consequently, with the practical limitations, these concepts are found inappropriate for evaluating the environmental forces affecting the oil and gas industry and influencing their growth strategy because the external forces are ignored in the Ansoff matrix.

Accordingly, the study will employ notable and relevant strategy frameworks and tools (section 3.3) and change management models (section 3.4) in an attempt to achieve the study's aim (section 1.3).

3.1.2 Strategic Management in the Oil and Gas Industry

Poister (2010) observes that the need for strategy and strategic management in an organisation has never been more critical and appropriate than in recent years. This is due to the increasing pressure exerted on the oil and gas industry by environmental forces, hence, compelling organisations to review their mode of operation and redesign strategies, including the goals and objectives of the organisation, to accommodate the pressures placed on the industry by these forces while ensuring growth and profitability (Favorea et al. 2015). However, Pina et al. (2011) and Andrew et al. (2010) believe that uncertainties remain, concerning the competence of strategic management in improving performance and generating positive changes in response to environmental forces in the industry. Kool and George (2020) as well as Williams and Lewis (2008), also observe that strategic management appears to be the practice in public organisations and government agencies. But Kool and George (2020) argue that strategic management, can enhance growth and profitability in an organisation. These scholars suggest continuous organisational learning as an effective practice for maximising this potential and achieving the desired organisational and societal change (Kool and George 2020; Williams and Lewis 2008). They argue that this strategic management practice helps the organisation to respond positively and timely to the demands and responsibilities generated from globalisation, shifts in social and demographic trends, in addition technological advancement.

According to (Steiss 2019), strategic management provide an interface between performance capacity of an organisation and the opportunity/challenges it encounters in the internal and external business environment. Steiss (2019), argue that that strategic management aim to primarily broaden the bases on which critical decisions are formulated and implemented. This author suggests that strategic managers must attempt to (a) identify the long-range needs of the organisation, (b) explore the ramifications of policies and programs designed to meet these identified needs and (c) formulate strategies that maximise the positive aspects of the foreseeable future.

These scholarly assertions of strategic management viewed from practice dimension aligns with Durand et. al (2017) stance. According to Durand et. al (2017) strategic management is a field of study that has its orientation and emphasis on practical application aim at solving task and organisation's challenges, with a view to achieving set organisation's goal. These scholars agree that strategic management possesses unifying beliefs concerning what is to be observed, what questions to explore, how those questions are to be structured and how, the result of the inquiry are to be interpreted. These believes include focus on the organisation as the primary level of analysis; recognition that the organisation differs in the context of value creation, value capture (firm performance), value distribution and intermediary outcome. These outcomes include but not limited to competitive tenacity, innovativeness, legitimacy, status, and reputation. Based on the scholarly argument and the aim of this study (section 1.3), firm performance is viewed as the fundamental domain that strategic management addresses. The analysis of firm performance is categorised into constructs that attend to temporal dynamics such organisation's survival, rate of growth, change and profit persistence, as well as difference in outcomes. For instance, there are abnormal, relative, or advantage-based profit measures. Although, these measures enhance our understanding of supply side of value creation which relates to firm's activities, resources, value to stakeholders and capability to differences in performances. The quest to understand firm performance and competitive heterogeneity, has inevitably increased and fosters researcher to explore the field of strategic management.

According to Harrison (2003), strategic management is a process through which organisations analyse and learn from their internal and external environments, create a strategic direction, formulate strategies channelled towards driving the organisation in the desired direction and implement those strategies to satisfy stakeholders. Similarly, Finlay (2007), opines that strategic management is the process of directing an array of goals through the precise definition of the current state of an organisation, future aspirations and the time frame required to achieve each stage. Hence, the process plays the role of a vital pathway to achieving the overall goal of an organisation. Strategic management entails major intended and emergent initiatives involving the utilization of resources by the organisation's top management on behalf of the stakeholders to enhance the company's performance in their internal and external environment (Clegg et al. 2017; Nag et al. 2007). Strategic management is collectively concerned with managing organisation environmental relations in the context of responding to external threats and opportunities, negotiating resource interdependencies with stakeholders and strategically navigating vis-a-vis competitors in the marketplace (Best et al. 2007).

Poister et al. (2010), however, observe the absence of studies showing clear empirical evidence of the positive influence of strategic management on the public sector, especially for industries operating in emerging economies like Nigeria, where environmental forces continue to exert persistent pressure on their operations (Bajire and Namada 2013). However, Kuipers et al. (2014) state that public organisations' complex and multifaceted nature makes achieving organisational and societal change through long-range planning and management difficult challenges. This is because of the ambiguity of goals and the presence of multiple stakeholders (Pollitt and Bouckaert 2011). Nevertheless, this emphasises that long-range planning and identifying strategies for change can lead to enhanced performance when appropriately implemented. Consequently, the adoption of organisational learning as a strategy for growth by the NNPC was investigated to understand the timely and positive response of the organisation to the environmental forces.

This observed gap served as a prompt in investigating the role of stakeholders and other environmental forces in strategic management of the public sector, such as NNPC and the overall influence of these variables on the corporation's growth and profitability. Accordingly, this study sets out to understand the influence of changes in the internal and external environmental forces and continuous learning from the successes and failures of the organisation on strategic planning and performance of the NNPC (as a public organisation). Thus, understanding the process and factors which influence the adoption of the strategic model deployed by the corporation and the strategies put in place to achieve the ambiguous commercial and non-commercial objectives of NNPC (Kools and George 2020; Akinola 2018; Akinrele 2016 and Nwokeji 2007). In this study, the environmental forces impacting on growth strategies of NNPC are highlighted in section 2.1.1.

All these scholarly assertions recognise firm performance as a core component of strategic management nevertheless, they all agree that strategic planning is another critical construct of strategic management towards achieving organisations set goals. This is because empirical evident claim that planners outperform non-planners by a wide margin on most of the financial performance indicators employed and concluded that top management of any profit seeking organisation is delinquent if they do not engage in fully integrated strategic planning. Bryson et. al (2018), view strategic planning as a deliberate, discipline effort to produce fundamental decisions and actions that shape and guide what an organisation (or other entity) is, what it does and the rationale behind what it does. These scholars also observe that strategic planning can be and often is part of the broader practice of strategic management that link planning with implementation on and ongoing basis (Kools and George 2020; Bryson et. al 2018; Durand et. al 2017; Bryson 2003). This definition of strategic planning aligns with the stance of design school that views strategic planning as a set of planning activities such as setting objectives and goals, developing targets and performance indicators, and allocating resources (Ansoff 1991; Mintzberg 1990). Nevertheless, the value of strategic planning is heavily debatable within the domain of strategic management literature (Miller and Cardinal 1994). For instance (Mintzberg 1994) argue that the institutionalisation of strategic planning with organisations, detaches the planning activities from the doing of strategy. Accordingly, its activities, embedded in formalised planning systems, becomes marginal in actual strategy making. The claim that the institutionalised nature of strategic planning is re-enforced by the utilisation of formal strategic plans aligns with Mintzberg, Ashstrandt (1998) and Lampel 1998) stance. While such formal strategy document purport to capture an organisation's intended strategic directions, scholars such as Mintzberg and Waters (1985), Mintzberg et. al (1998) claim that "plans, by their very nature, are designed to promote inflexibility". These scholars thus argue that strategic planning has never been strategy making and failure of planning stems from its formalised and institutionalised nature.

Regardless of these criticism, recent studies illustrate that strategic planning remains popular activity within organisations (Whittington and Cailuet 2008; Hodgkinson et. al. 2006; Rigby 2003). For instance, a study of eight major oil and gas companies showed that all the companies in the sample, engaged in formal, strategy planning process built around an annual cycle (Grant 2003).

Summarily, it is right to state that strategic planning points out the relevance of strategy formulation (decision making) that will ensure organisation's ability to successfully respond to environmental forces that impact growth strategy and profitability.

3.2. Overview of Key Debates in Strategic Management

Empirical evidence suggest that the traditional narratives of strategic management no longer fulfil the need for industry practitioners, consultants, researchers, and business owners operating within contemporary business environment (Pineda et.al 2020; Philips and Moutinho 2018; Durand et. al 2017; Hossain 2017; Laamanen 2017; Easterby et. al 2009).

Accordingly, these scholars provide a differentiated approach to the field of strategic management, highlighting the dichotomy between theories and practice thereby providing insight of the future strategic management. For instance, there are scholarly debates for further research including but not limited to topic areas such dynamic capabilities, strategic planning and strategic issues, business model innovation, strategic management in different context, corporate social responsibility, strategic planning and strategic issues management system, strategic tools, strategy implementation, strategic management in different contexts, merger and acquisitions programs, strategic alliances, sharing economy, cognitive and psychological foundations of strategy, amongst others (Pineda et.al 2020; Philips and Moutinho 2018; Durand et. al 2017; Hossain 2017; Laamanen 2017; Easterby et. al 2009).

Although these identified contemporary debates in the field of strategic management are pertinent, the discussion goes beyond the short-sighted goal of profit maximisation and illuminates measures that are critical such as value. Nevertheless, this study will concentrate on key debates that aligns with this research aim (section 1.3) and provide an illustration of competitive advantage from market-based perspective, giving insight into events that lead successful strategy formulation and unsuccessful strategies aimed at achieving growth and profitability.

- Dynamic capabilities

The field of dynamic capabilities has evolved very rapidly in the last decade as noted by Feiler and Teece (2014); Shuen et al. 2014; Easterby et al. 2009). For instance, there is increasing evidence by way of citation counts and amount of programme time allotted to dynamic capabilities at major conferences such Strategic Management Society (SMS) and Academy of Management (Easterby et al. 2009). This is because dynamic capability is closely associated to resource-based view which itself, is a highly active domain in strategic management (Clegg et al. 2017; Grant 2016; Kannothra and Haigh 2016; Haigh 2015; Agnihotri 2014). Nevertheless, the focus of dynamic capability is squarely on dynamics elements, thus inferring that there is dynamic resource-based view (Shuen et al. 2014; Easterby et. al 2009). Easterby et. al (2009) posit that resource-based view focus on critical issues such as competences and organisation's performance, however, dynamic capability is concerned with dynamic elements and with mechanisms that triggers organisational change. Thus, dissociating itself from the criticisms of static and equilibrium-based model levelled against resource-based view (Simon 2013; Teece 2010; Easterby et al. 2009). According to Easterby et al. (2009), dynamic capability is related to strategic renewal, adaptation, and growth. Easterby et. al (2009) stance on dynamic capability complement Helfat and Peteraf (2009) view, which point out that dynamic capability entails temporal dynamics and capability lifecycles, as well as the lifecycles and evolutionary paths of a firm. This implies that dynamic capability accord recognition to the impact of external environmental forces that impact on growth and profitability of a firm that operate in an increasing turbulent and hypercompetitive environment. This implies that dynamic capability is concern with the mechanism for change (Simon 2013; Teece 2010;

Easterby et al. 2009). This is because dynamic capability is linked with innovation and organisation learning which in turn is linked with knowledge management (Easterby et al. 2009; Kogut and Zander 1992). According to Easterby et al. (2009) dynamic capability focused on two critical issues, namely, the nature of dynamic capability and secondly, the definition of the term. These observed issues are interrelated and are critical to developing, testing, and applying the constructs of dynamic capability effectively to aching set organisation's set goal.

There are several broad definitions of dynamic capability. For instance, Teece et al. (1997) defined dynamic capability as the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environment. This scholarly definition of dynamic capability captures and addresses some part of the research aim (section 1.3). Nevertheless, this definition from the beginning, present the question of what constitute such abilities, what the attributes are, how they can be identified and their origin. However, Helfat et al. (2007) observe the limitation of Teece et al. (1997) definition and then present a precise definition. According to Helfat et al. (2007), dynamic capability is the capacity of an organisation to purposefully, create, extend, or modify its resource base. This definition makes few priori assumptions considering its broad nature that allows researchers to learn more about the nature and origin of dynamic capability. This study appears to align with the definition provided by Helfat et al. (2007), this is because this definition provides the opportunity of other researchers to refine, reinterpret and expand the concept of dynamic capability.

Accordingly, this study will explore other models such as business model innovation, strategic tools, strategic communication amongst others. This is because dynamic capability is still in its nascent form, with many opportunities to refine and deepen the model. Furthermore, many questions remain apart from those driving the key debates, this questions still need to be clearly addressed, such as, difficulty in identifying dynamic capability as the capability to effect change remain hidden until exercised and may then not even be utilised to its fullest degree. Similarly, much needs to be learned about the mechanisms, processes and intermediate outcomes associated with dynamic capabilities.

- Business Model Innovation (BMI)

This is an emerging field in the realm of strategic management that has attracted so much attention from both academicians and industry practitioners (Markides 2013; Casadesus et al. 2012). It is an extension of business model concept and it represent a new activity system that entails innovation, value creation and value capture structure of a firm and its alliances (Bouncken and Fredrich 2016). According to Hossain (2016), a recent survey of over 4000 senior managers found that 54 percent of them choose BMI to product and service innovation to gain competitive advantage. This implies that BMI is highly relevant to industry practitioners. Similarly, a study conducted by IBM with a sample of 750 global managers shows that BMI is positioned much higher on strategic drivers of organisation's priority lists than might be expected (Pohle and Chapman 2006). Evidence from this study suggest that large corporations such as Amazon, Google, Apple, Samsung, amongst others succeeded not just because of technological innovation but also because of the recognition given to BMI and its application (Hossain 2016; McGrath 2010; Pohle and Chapman 2006). This study found that the firms that apply BMI enjoy higher margins than their competitors that are only product and innovation driven. According to Teece (2010) many firms' failure are attributable to lack of BMI. This implies that BMI determines a firm's long-term success or failure.

According to Santos et al. (2009), BMI is a configuration of activities in in the existing business model of a firm that is new to the product/service market in which a firm competes. This implies that BMI address the question of what value a firm is providing to its customers and how this value translates to profit for the firm (Comes and Berniker 2008). Similarly, Teece (2010) defined BMI as a type of organizational innovation in which a firm identify and adopt novel opportunities portfolios. Gambardella and McGahan (2010) agree with Teece (2010) view on BMI by also stating that BMI takes place when a firm adopts a novel approach to commercialise its assets.

Although the subject of BMI is relevant to this study that to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Nevertheless, evidence point out that BMI has been poorly explore compared to product and process innovation in the field of strategic management (Bucherer et.

al 2012). This is because studies on BMI are limited, fragmented fashion and emerging in a disparate pattern (DaSilva and Trkman 2014). There are scholarly assertions that literature for BMI lack well established definitions, proper constructs, and theoretical foundation (DaSilva and Trkman 2014; Bock et al. 2012; Bucherer et al. 2012). These scholarly claims of BMI being in an infancy state makes its suitability difficult in this study. Furthermore, according to these scholars, BMI has been inadequately understood and applied by both industry practitioners and academicians (DaSilva and Trkman 2014; Bock et al. 2012; Bucherer et al. 2012).

- Strategic planning and strategic issues management systems

Organisations, especially in the oil and gas industry have been impacted by unprecedented environmental uncertainties, and strategic planning and strategic issues, thus, requiring response and sensitivity to cope with the changing environment (Johnson et al. 2018; Bryson and Edwards 2017; Clegg et al. 2017; Thomson et al. 2017; Grant 2016; Eggart et al. 2014). Empirical evidenc point out that lack of appropriate response and sensitivity to these unprecedented environmental uncertainties is extremely expensive, even jeorpadise the viability of such organisation (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). Accordingly, there are scholarly suggestion for the utilization of conventional Strategic Planning Systems (SPS) as a response mechanism to achieve organisational's viability. However, a major shortcoming of conventional Strategic Planning Systems (SPS) is their lack of sensitivity in responding to this complex and dynamic environment where organisations operate, thus the emergence of Strategic Issues Management Systems (SIMS) in the 1980s (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). Similarly, these scholars observe that Strategic Issues Management Systems (SIMS), which is an emerging approach deployed to responds to these unprecedented environmental uncertainties and strategic issues also provide weak signals and inability to manage turbulent environments, lack some of the visionary, enduring, motivational qualities of the SPS. These observed weaknesses necesitate the integration of the SPS and SIMS so as to complement their individual strength and mitigate their respective shortcomings (Camillus and Datta 1991).

SPS is a set of organizational task definitions and procedures for ensuring that critical information is obtained, forecasts are made, and strategic choices are addressed and evaluated in an integrated, internally consistenet, and timely pattern (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). These scholars point out that SPS is concerned with effort directed the development of organisation's purpose, strategy formulation and implementation of policies by which organizational goals and objectives are achieved. This implies that strategic planning activity in an organisation strategic drivers and managers address issues such as business objectives, vision, mission, target and determination of level of achievement.

To respond and mitigate unprecedented environmental uncertainties and organisation's strategic planning and strategic issues, SPS employs some basic commonality of factors pattern (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). These factors (constructs) are presented below:

- ✓ Environmental analysis
- ✓ Defining goals and objectives
- ✓ Internal analysis (evaluation of strengths and weaknesses)
- ✓ Formulation and Evaluation of alternatives strategies
- ✓ Strategy selections
- ✓ Operational plans and implementation
- ✓ Performance evaluation and and feedback

These scholars point out that a characteristic feature of the SPS is that the planning cycle is reated at a pre-specific interval, the frequency of which is dependant on factors such the nature of the business, industry characteristics, degree of environmental uncertainties. However, these scholars were quick to note that comprehensive planning process in complex organisation can not be effectively conducted frequently, thus submit for 3 to 5 years period (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). They assert that overly frequent repetition of comprehensive [lanning process create undesirable and counter-productive scenerion, resulting to ritualistic form filling exercise, rather than sensitive and creative activities.

Conversely, scholars such as Haye's point out, environmental volatility and changes in the oil and gas industry result in significant deviations from forecast, making elaborate strategies based on such forecast obsolete. This implies that rigid plans have the undesirable effect on reducing a company's flexibility, resulting in missed opportunities. Scholars advised for "responsiveness planning as the appropriate form of planning in such circumstance period (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). Hence, necessiatating SIMS. Strategic issue management is a process of constructive adaptation to discontinuity Camillus and Datta 1991).

SIM is viewed as a set of organizational procedures, routines, and processes devoted to the perceiving, analyzing, and responding to strategic issues (Camillus and Datta 1991). Key features of SIMS include flexibibility, sensitivity, and action oriented with the objective of reducing the probability of strategic surprises, particularly in the context of negative impact of unanticipated events (Bryson and Edwards 2017; Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). The SIM process is identified with the following construct:

- ✓ Continuous monitoring of the environment
- ✓ Identification of issues
- ✓ Assessing issues
- ✓ Judging their likely impact and establishing priorities
- ✓ Planning strategies and tactics for handling issues in accordance with assigned priorities, and finally,
- ✓ Implementing tactics and planning activities

The focus of SIM is the realization of an organization's objectives by helping it anticipate, identify, and respond to changes in external environment that have the potentials causing significant impact on the organization. For instance, demographics, values/lifestyle, global oil and gas price, government policies, economic trends, and technology, which determine the growth strategies adopted by organisations and their subsequent impact on the performance of an organisation, particularly, NNPC (Akinola 2018; Akinrele 2016; Opong et al. 2016; PWC 2016; Al-Fattah 2013; Nwokeji 2007).

Some scholars argue that most strategic issues are triggered by threat or opportunities which emanent from the external environment (Health and Palenchar 2008; Grant 2003; Reeves 1993; Camillus and Datta 1991). This study defines strategic issues as development which in the judgement of strategic driver and managers of NNPC are likely to have significant impact on the organisation's present and/of fututr strategies.

Extant literature confirm that organisation have started viewing issues management as being critical and thus, the coomitment of additional resources this effect. Nevertheless, some organisations, especially in the emerging economies such as Nigeria, are still not sure of how to issues can be managed or how issue management can be an integral part of strategic planning department. This research aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. The identified constructs of SPS and SIMS align appropriately with the study's aim. Accordingly, this study pitched within this emerging debate of strategic planning and strategic issues.

- Strategic management in different context

Extant literature confirms that researchers in the field of international business pursue a dichotomous approach to examining developed and developing countries, assuming high homogeneity within each class (Luo and Wang 2011). There are scholarly evidence of diagnosed motives, behaviour, strategies, and practice of internationalization by developed countries multinational enterprises (MNEs). On the same vein, empirical evidence also exists of similar assessment in the developing countries (Luo and Wang 2011; Peng et al. 2009; Aulakh et al. 2000). However, there are limited comparative studies in the domain of international business decisions, strategies, and performance between developed and developing countries MNEs (Chua et al. 2009; Khana and Palepu 1997) or between firms from different developed countries. These scholars posit that there are effort towards understanding comparative context of various international business and management issues for firms from different countries. Nevertheless, not much has been achieved when comparing firms from different developing countries. This observed gap has serious repercussion in today's world as firms compete globally against rivals from countries within the same class. Attempt in bridging this gap led to the emergence of Comparative Strategic Management (CSM) which is yet to receive much attention in the field of international management (Mudambi and Swith 2011). There are scholarly assertions that this deficiency becomes more critical as strategic decisions exert greater and more enduring consequences that functional issues on a firm's long-term growth and performance (Berisha et al. 2017; Mangaliso and Lewis 2012; Luo and Wang 2011; Mudambi and Swith 2011). CSM analyses the extent to which strategic managmenet principles, policies, and practices apply from one country to another (Luo and Wang 2011; Peng et al. 2009; Aulakh et al. 2000). It involves the simultaneous study and comparison of a multitude of strategic management principles, policies, and practices in two or more countries. CSM seeks to determine what, among these principles, politices and practices, is universal or homogenous and what is distinctive or heterogenous among nations. Scholars point out that CSM exists because (1) certain fundamental principles in strategic management, such as important of core competence, are tranferable from one locale to another under a variety of circumstances and (2) many concrete strategies and practices, such as practices in building core competence, are context and culture-bound, differing remarkably across locale (Luo and Wang 2011; Peng et al. 2009; Aulakh et al. 2000; Hoskisson et al. 2000).

Context-freee models or knowledge are fundamental priciples or models in strategic management. For instance, resource base view (RBV) and dynamic capability theory are vliad perspectives and they apply almost universally. So are analytical models, such as Micheal Porter's five- force model and generic competitive strategy typology (Luo and Wang 2011). Nonetheless, a myriad of strategic choices and processes are quite contexual-dependent. For example, confronted with increasing globalization and ensuring fierce global competiton (Hoskisson et al. 2005).

CSM conduct its analysis employing four major components as scholarly observed (Luo and Wang 2011; Peng et al. 2009; Aulakh et al. 2000; Hoskisson et al. 2000). These constructs are:

- ✓ Evironmental differences, (economic, institutional, and socio-cultural),
- ✓ Capability differences (possession, deployment, and upgrading),
- ✓ Strategic differences (orientation, formulation, and implementation), and, finally,
- ✓ Environmental-strategy and capability-strategy alignments as well as performance consequences.

Environmental and capability attributes establish the sources of inherently distinct strategic inputs, externally and internally. Environmental, differences determine the opportunities and threats facing firms across countries, while capability differences reveal the strengths and weaknesses of firms in different countries. Together they produce strategy variations across nations.

Although, CSM is an emerging debate with limited international management attention Mudambi and Swith 2011). Nevertheless, CSM serves as a diagnostic template in which academics and industry practioners are guided to explore appropriate paths for internationally active firms aiming to simultaneously leverage comparative and competitive advantages through strategic manoeuvres. Interestingly, the four constructs of CSM align with this study that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Accordingly, it is appropriate to state this this study situate within the domains of strategic management in different context.

Hence, future research may employ this CSM constructs as a platform to probe environmental trends and insight into comparative environments, comparative capabilities, and strategies across emerging economies of the world.

- Strategic Communication

Strategic communication entails all communication that is critical to the viability of an entity, such as corporations, government, non-profit organization, social movement, known individuals (Zerfass et. al 2018; Winkler and Ette 2018; Nothhaft 2016). There are scholarly claims that communication play significant and distinctive role for the formulation, revision, presentation, execution, implementation, and operationalization of strategy (Zerfass et al. 2018). Nevertheless, it has been argued that the overall concept of communication is attractive but rather fuzzy and not adequately defined nor explored to their full extent (Zerfass et. al 2018; Winkler and Ette 2018). Strategic communication is the purposeful utilization of communication by an entity to engage conversation of strategic importance to its goals (Zerfass et. al 2018). According to Zerfass et al. (2018) strategic communication takes the perspective of the focal organization/entity and its calculus to achieve specific goals by the vehicle of communication under conditions of scare resources and environmental uncertainty. Debate in the context of strategic communication has been ongoing for over a decade now. Accordingly, there are scholarly argument for the review of the current state strategic communication thinking. Along this line of thinking, strategic communication can be developed as a research field, if it has specific research objects and specific research perspective, along with institutional manifestations (publications outlets, conferences, research projects and study programs) that create an accumulated body of knowledge such as theories, concepts, empirical insights, and frameworks (Zerfass et al. 2018; Winkler and Ette 2018). These critical assets will allow the strategic communication to enact a distinct role in the overall concert of knowledge production and disciplinary discourses.

Although, strategic communication is relevant to this study's aim (section 1.3). Nevertheless, strategic communication needs to draw on other disciplines as well. This is because as an applied science, it requires an interdisciplinary approach that integrates but also limits itself to any knowledge about designated object and perspective of research (Werder et al. 2018; Szostak 2013).

- Strategic Tools

Industry practitioners use strategic tools to support situational analysis and evaluation of strategic choices (Tapinos et al. 2005; Grant 2003; Orndoff 2002). Strategic tools such as PESTEL, SWOT, Porter's 5 Forces model and Resource-based View (RBV), Boston Consulting Group (BCG) amongst others are used by managers and considered to rationalise process of strategic decision making (Cabantous and Gond 2011; Jarratt and Stiles 2010). Conversely, critiques like Mintzberg (2004), argue that excessive test in these "technologies of rationality", are potentially inappropriate props for decision making that "defend utopia of the mind against realism of experience".

Bridging this gap between the utopia of the mind (the theory of how strategic tools should be used) and the realism of experience (how managers actually use tools) squarely falls in the strategy-as-practice research debate (Jarzabkowski and Kaplan 2014; Vaara and Whittington 2012; Golsorkhi et al. 2010; Orlikowski 2010; Johnson et al. 2007). To address this observed challenge, a "sociological eye" is being suggested to strategy, examining not only specific tools or actors, but also the rich interactions within which people and things are engaged in doing strategy work (Whittington (2007). The suggested sociological eye encourages close attention to tools as they are used in context, the motivations of actors in utilising them, the purpose to which tools are put and the potential to lead an array of sometimes unanticipated outcomes.

Strategic tools are intended to be useful in coping with the uncertainties associated with strategy formulation. Nevertheless, March (2006) claims that it is precisely in periods of greatest uncertainty that use of such tools can be inappropriate. Thus, leading to decision disasters which stem from oversimplification or misrepresentation encoded in tools. March (2006) argues that technologies of rationality are less reliable where the environment is uncertain, the situation is causally complex, preferences are ambiguous, or there are important interpersonal trade-offs. According to these scholars, industry practitioner may make inept use of tools by getting the wrong information or overlooking important variables (Jarzabkowski and Kaplan 2014; Vaara and Whittington 2012; Golsorkhi et al. 2010; Orlikowski 2010; March 2006). Similarly, these scholars point out that industry practitioner may use tools for rhetorical purpose to justify positions that support their political interests. Such actions are cast as failures (or even deliberate distortion and deviance) in using tools, which can lead to poor strategic outcome.

Interestingly, strategic tools appear to align with this study. Nevertheless, research on strategic tools is limited. Much of the earlier interest was in practitioner-oriented journal. However, more recently, as part of the strategy-as-practice movement, studies in strategic tools have begun to penetrate the periphery of journals (Jarzabkowski and Kaplan 2014; March 2006).

- Strategic Planning

Strategic planning is defined as the process by which organisations determine and establish long-term directions, formulate, and implement strategies to accomplish long-range objectives while considering relevant internal and external forces (Hax and Majluf 1990). The process of strategic planning entails series of activities that commence with the definition of the organisation's mission, development of strategic objectives, designing of strategies and ends with development of detailed plans to ensure that the strategies are implemented to achieve organizational objectives. Included in this process of strategic planning, are identification of future opportunities to be exploited, threats to managed, critical evaluation of organization's strength, weaknesses, and control mechanism to ensure that the organization remains on course to achieve set objectives (Ugboro et al. 2011; Hax and Majluf 1990). These scholars point out that, strong commitment of strategic drivers of the organization is required and remain an essential element of successful strategic planning and execution because it signals the commitment of the organization to strategic planning.

Nevertheless, there is a long-running debate between the rational design and emergent process' school of strategy formation has involved caricatures of firms' strategic planning process (Ugboro et al. 2011; Grant 2003). These scholars point out that there is little empirical evidence of whether and how companies plan. Regardless of the presumption that environmental forces render conventional strategic planning all but impossible, the evidence from corporate planning suggests that report of the demise of strategic planning are greatly exaggerated (Grant 2003).

Grant (2003) points out that since 1980s, strategic planning, that is systematic, formalized approaches to strategy formulation, has witnessed scholarly criticism. These criticisms have addressed the theoretical foundation of strategic planning, especially the impossibility of forecasting (Mintzberg 1994), while empirical evidence in the context of longitudinal case studies and investigation of strategic decision-making points to strategies emerging from weekly coordinated decisions of multiple organizational members (Paschal 1984; Burgelman 1984; Mintzberg and Waters 1982).

Strategic planning has become difficult and underpinned by the increased volatility of the business environment. Rapid change requires strategies that are flexible and creative characteristics which, according to Hamel (1996), are seldom associated with formalized planning. According to Hamel (1996), majority of the company's strategic planning is calendar-driven rituals that the future would like to be the present. There is scholarly discourse about the adaptability of strategic planning practices to a world of rapid changing, volatile and unpredictable change (Eisenhardt 1989, Brown and Eisenhardt 1997).

Despite several debates on merits of strategic planning and continued interest in strategic decision process within firms, there are no information about the how companies formulate their strategic plans (Eisenhardt 1989, Brown and Eisenhardt 1997). Similarly, the study of strategic planning has been limited because of lack of empirical investigation of the phenomenon itself. These scholars observe that strategic performance studies relied largely on superficial characteristics of strategic planning practices based mainly upon questionnaire data Eisenhardt 1989, Brown and Eisenhardt 1997).

- Corporate Social Responsibility (CSR)

As environmental and population growth problems become increasingly apparent as we move towards 2050, we need to develop long-term strategies that will enable us to overcome nationalistic self-interests (Laamanen 2017). This will ensure our survival and prosperity in the future.

CSR remain a continuous debate amongst industry practitioners, scholars, and strategic drivers of firms. These debates stem from two worldview of the responsibility of the firm. Firstly, managers should make decisions that maximise the wealth of the firm's equity holders (Friedman 1962). Secondly, because the firm utilizes resources from the society, they should have a duty to the society that extend beyond simply maximizing wealth of equity holders (Freeman 1984). The debate on understanding the relationship between a corporation's financial performance and social performance have remain unresolved in the last four decades as scholarly observed (Walch et. al 2003; Orlitzky 2003; Freeman 1984). From strategic management perspective, the question of how a firm can balance these conflicting demands between wealth creation for equity holder and CSR remain an increasing debate.

CRS appear relevant to this study's aim (section 1.3), given that corporate resources are limited, organization operate within a social context with stakeholder interactions. Resources allotted to CSR are fewer to maximise the equity holders interest (Barnett 2007). Thus, it implies that this debate stems from identifying whose interest are much important for the firm to manage based on resource availability.

Untangling the relationship between the stakeholders is an area of strategic management requiring clarity and unfolding. This dichotomy of interest makes the application of the CSR in this study inapplicable.

In conclusion, this section explores important, emergent phenomena, namely dynamic capabilities, business model innovation, strategic tools, strategic communication, strategic planning, corporate social responsibility, amongst others. By analysing these emerging debates in the domain of strategic management, this study provides insights into these themes and their relevance for the future in the desire to attain set performance standard. Most of these debates appear to align with this study aim which is to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Nevertheless, identified emerging debates such as merger and acquisitions programs, sharing economy, cognitive and psychological foundations of strategy, are inadequately suitable. This is because these debates are limited in scope and lack sufficient literature needed for this kind of studies that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

This study aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Accordingly, debates in the context of dynamic capabilities, business model innovation, strategic tools, strategic communication, strategic planning, corporate social responsibility, strategic planning aligns with the study aim (Section 1.3) however, with some observed limitations. Nevertheless, there is need for the strategic drivers of NNPC to recognise, explore these emergent debates to remain viable in this complex and dynamic oil and gas environment.

3.2.1 Strategic Management in Public Sector

Public sector refers to business and industries that are owned or controlled by the government with core responsibility of providing service to the public (Kearney et al. 2017; Favoreu et al. 2016; Cribb et al. 2014; McBain et al. 2010; Lane 2000). NNPC is 100 percent owned by FGN with the responsibility to render service nationally and internationally (NNPC 2018). Accordingly, NNPC is public sector organisation though with both commercial and non-commercial objectives.

Strategic management is essential in public service delivery (Joyce 2015). This is because application of strategic management to public service led to better performance and enhanced outcomes for the public (Kearney et. al 2017; Favoreu et al. 2016; Joyce 2015; Cribb et al. 2014; Lane 2000). These scholars point out that the private sector idea of strategic management has become essential in the public sector that politicians and policy-makers have begun to discuss the importance of modern State, this is in anticipation of being a strategic state. This assertion aligns with McBain et. al (2010) views on strategic management in public service. According to McBain et. al (2010), strategic management has become a standard tool for the public managers to create value and shape the organisation. Considering increasing environmental complexity, standard models such Management by Objectives (MBO) or the Deming Cycle are arriving at limits to describe what public service organisations must attain in terms of performance and satisfaction of their stakeholder expectations. The Deming Cycle or Plan-Do-Check-Act (PDCA) is a four-step iterative technique utilised by managers to solve problem and improve processes in organisation (Kearney et. al 2017; Favoreu et. al 2016; Joyce 2015; Cribb et al. 2014; McBain et. al 2010).

There is scholarly argument that strategic management in the public sector is very poor and that decision making would be better if politicians, civil servants and public managers that manage the public sector simply mimic or copied private sector techniques such as strategic management styles (Akinrele 2016; Oyewunmi and Olujobi 2011; Nwokeji 2007). Conversely, a review of extent literature points out that, it is this complex and dynamic business environment that strategic management is particularly needed to formulate proactive response to this change (Obeng and Ugboro 2008; Putohit 2007; Aker 2003; Roney 2003). This conflicting stance suggest the need to understand the context of the public sector and understand the nature and complexity of the environment which makes simple repetition, ineffective and unsuitable. Accordingly, if there are lessons to be learnt from the private sector, we should be expecting politicians, civil servants, and public managers to be selective in drawing lessons and be ready to modify/ experiment with the practice of strategic management (Kearney et. al 2017; Favoreu et al. 2016; Joyce 2015; Cribb et al. 2014). This implies that the public sector context has features that should be recognised and considered carefully when it comes to modifying strategic management to ensure success in public service delivery and institutionalisation.

To provide answers to the dilemmas of strategic management in public sector, there are scholarly suggested theoretical concepts and frameworks, aimed at achieving success in public service delivery and institutionalisation (Favoreu et al. 2016; Joyce 2015; Cribb et al. 2014; McBain et al. 2010; Obeng and Ugboro 2008; Putohit 2007; Aker 2003; Roney 2003). These theoretical concepts and framework include but not limited to "the rational approach", "political approach" and collaborative strategic governance and management".

- The Rational Approach

According to Favorea et al. (2016), the Rational Approach emanated largely from the school of design embodied by Christensen et al. (1973) and from the normative approach to strategy, which was developed by Ansoff (1987). The rational approach is based on the principles of the absolute rationality of decisions and economic optimization of choices and adopts a mainly methodological and procedural view of strategic management (Kearney and Mareschal 2017; Joyce 2015; Cribb et al. 2014; Lane 2000; Simon 1983).

According to the rational approach, strategy is viewed as a product of intellectual methodology of reflection and design. It is organized in a sequential, structured process that guarantees objectivity, rationality, and the effectiveness of the strategic choices accordingly. Favorea et al. (2016), compliance with the different steps and the use of analytical tools and optimization methods ensure the optimality and performance of strategic choices. This implies that strategy formulation consists primarily of a scientific approach involving critical analysis, planning, and programming.

Whittington (1993) points out that rational approach is associated with the idea of a deliberate and programmatic change control, using a strategy formalized in the shape of objectives and actions plans. These scholars state six core principles and assumptions, such as:

- the environment can be understood, analysed, and anticipated
- the change is intentional and future of the organization can be programmed

- The organization take the form of hierarchies, homogeneous group that share and accept the same goals and that act in their implementation
- the organization identifies with its leaders and its members with agents
- analysis and reflection take place before any action and
- the managers play a central role as planners and decision-makers

Underpinned by these six core principles and assumption, it is fair to state that the rational approach favoured the strategic formulation and planning phase, identifying simultaneously with the later. Most recently, the concept of strategic management and performance, have stressed the important of support and monitoring actions, as well as the need to bring on board more political, cultural, and organizational factors (Favorea et al. 2016; Whittington 1993). Nevertheless, Bryson et al. (2010) observe that most of the model pay little attention to political and conflictual nature of the public decision-making process and accordingly provide little information and knowledge on how public managers handle the political pressure and their pluralistic nature of the environment.

Regardless of the mixed results and its poor capacity to guide public decision, the rational approach has had strong influence on the modernization effort and managerial reforms undertaken in the last 30 years (Favorea et al. 2016; Whittington 1993; Backoff and Nutt 1992). Instances are the Planning Programming and Budgeting System (USA), the Rationalisation des Choix Budgetaire (RCB) in France.

Most recently, the drive to modernize the public sector through New Public Management (NPM) led to emergence of Government Performance and Result Act (GPRA) in the USA, the Local Government Modernisation Agenda in England and Loi Organique Relative aux Lois de Finances (LOLF) in France and the Nigeria Public Sector Act in Nigeria (Favorea et al. 2016; Whittington 1993; Backoff and Nutt 1992). This reform focus on implementing strategic objectives of the respective public sectors, as well as establishing performance based and result-driven management (Backoff and Nutt 1992).

- The political approach to public strategy

The political approach emerged in response to the principles and assumptions of rational planning model (Favorea et al. 2016). Contrary to an absolute and economic rationality of policymakers, this approach is underpinned by rationality that is limited by intellectual ability and cognitive biases particular to everyone. There are scholarly claims that the individual and collective cognitive considerations, serve to generate differences in the assessment of the organization and its environment (Kearney and Mareschal 2017; Joyce 2015; Cribb et al. 2014; Simon 2013; Lane 2000). These scholars observe that the limited amount of information available to be analysed by individuals, prevents any exhaustive analysis of all the problems and the potential solutions (Simon 1983). Regardless of these criticisms, the advocates of political approach in the public sector reject the idea of the single and omniscient player that underlies the rational approach (Pressman and Wildavsky 1984). This implies that strategic homogeneity is thus undermined by the existence, within the organization and its environment, of multiple local rationalities with their own objectives and interests, consequently pursuing personal strategies. According to Marsh and Rhodes (1992), this simply means that logic of conflicts and battle of interests guide and structure the dynamics of decision making in an organizational environment. These scholars further point out that the conflict concern issues, such as the priority issues, the objective pursued and their methods of delivery as well as the allocation of resources (Elbanna 2006; Marsh and Rhodes 1992).

These states that the strategy formulation process usually follows a bottom-up approach. Hence, strategic issues emerge, driven by coalitions of players, due to lobbying and pressure from public officials (Favorea et al. 2016). Accordingly, these key issues will gain sufficient weight to get their attention and to be included on the political agenda. This leads to the development of solutions in the form of public policies. This means that strategies and public policies result from repetitive process of bargaining and negotiations, generating disparate and changing coalitions. In this context, change is emergent, discontinuous, unstructured and incremental (Kearney and Mareschal 2017; Favorea et al. 2016; Joyce 2015; Cribb et al. 2014). This implies that, decisions on actions to be adopted are taken in fragmented and disjointed pattern depending on the degree of consensus that they nurture or not, based on logic of economic optimization as scholarly pointed out (Kearney and Mareschal 2017; Favorea et al. 2016; Cyert and March 1970). This means that public policy formulation to some extend are unpredictable and difficult to control which lead to marginal improvement, incremental changes, and continual adjustments.

According to Favorea et al. (2016), the political management of public organization and the resulting time constraints are factors that serve to foster ambiguity, thus leading to ill-defined strategies that do not attract commitment of the parties involved in the process (strategy formulation and implementation). Interestingly, as scholarly observed, this suggest that the existence of strategic practices in the public sector is triggered more by a quest for social legitimacy and phenomena of mimetic or coercive isomorphism than the real need in the context of the planning and driving change. This is because the environment and organizational characteristics of public sector organisations, coupled with the nature of their mission, determines the contradictory decision-making and implementation process of the principles and the logics guiding the formal and analytical systems of strategic management (Favorea et al. 2016; Bryson 2004). Scholars argue that the political approach is, descriptive and resembles a decision model. Nevertheless, it gives no explanation as to the organized and large-scale changes experimented with by some public organisations (Favorea et al. 2016; Sminia and Van Nistelrooj 2006). The political approach appears to align with this study, nevertheless, the observed limitation makes total application of this approach not suitable in this study. This is because this study aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

- The collaborative strategic management and network governance

Underpinned by the observed limitations of the rational and political approaches in the administration of public sector, the collaborative strategic management and network emerged to bridge these limitations (Kearney and Mareschal 2017; Favorea et al. 2016; Joyce 2015; Cribb et al. 2014, Bryson 2010). The collaborative strategic management and network governance is concerned intra-organisation and inter-organisational collaboration. Intra-organisation and inter-organisational collaboration refer to sharing and distribution of resources, information and skills by organisation and individual from different sectors and areas to implement actions on a partnership basis and to collectively achieve results that no organisation can achieve on a separate basis (Favorea et al. 2016; Agranoff 2006).

The collaborative strategic management and network governance approach to strategy in the public sector borrows a number of concepts, ideas and principles from the theoretical currents such as stakeholder management, the analysis of social networks and collective strategies, the collaborative strategic management and network governance approach view strategy formulation as a complex phenomenon consisting of interactions and exchanges that are established between groups or network of interdependent players, leading to the co-production of solutions and collective strategies. According to Favorea et al. (2016), the collaborative strategic management and network governance approach is defined as the organized and structured process through which inter-organisational and multi-player groups, both public and private, develop, implement, and evaluate collective strategies.

There are scholarly claims that the collaborative strategic management and network governance approach to strategy has been legitimised by increasing use governments and public institutions of collaborative and participative modes of action organized around networks of multiple and diverse stakeholders from both the public and private sectors (Kearney and Mareschal 2017; Favorea et al. 2016; Joyce 2015; Cribb et al. 2014, Robertson and Choi 2012; Bryson 2010; Selsky and Parker 2005).

These scholars observe that this approach is particularly popular for the management of relatively complex social and environmental issues. Furthermore, they point out that the legitimacy and relevance of the collaborative strategic management and network governance approach result from: (1) the reduction of public budgets and resources; (2) the complexification of the public issues and social problems; (3) the need to involve civil society; (4) the dispersion of resources and expertise between multiple public and private organisations. Accordingly, this collation of ideas, resources, knowledge, perspectives, and visions leads to the production of collaborative benefits.

It is also insightful to point out that the network concept plays a cardinal role in the collaborative strategic management and network governance approach.

Network in the context of this study, is defined as articulations, stable, horizontal and vertical arrangement of public and private actors interacting according to cooperative relations, which contribute to the achievement of public purpose (Provan and Milward 2001). According to Favorea et al. (2016) coordination within these multi-stakeholder arrangements is based mainly on flexible social and relationship mechanisms such as shared value, trust, implicit standards, consultation and collaboration, hence, distancing itself from the rational bureaucratic mechanism based on control, hierarchy and chains of command. This pattern of inter-organisation flow of exchange encourage innovation through the harmonization of different visions, perspective and experience, leading to learning phenomena and ultimately, to the development of social capital (Favorea et al. 2016; Joyce 2015; Cribb et al. 2014, Robertson and Choi 2012).

Robertson and Choi (2012) point out two mechanisms that structures and support decision-making in networks, namely are, an interactive and deliberate dialogue in addition to consensus building. The strategies within these two mechanisms is achieved through interaction and exchange, which takes place between the different components, without any previously defined formalized plans. This means that strategy is viewed as a phenomenon of mutual learning. Shared experimentation, and innovation, supported by general principles, global values, and orientations in the form of strategic vision (Favorea et al. 2016; Joyce 2015; Robertson and Choi 2012). According to these scholars, these structural elements provide the frame of referenc and norms guiding the collaborative processes.

The collaborative strategic management and network governance reflects on operational and managerial approach to the network concept by questioning and addressing collaborative mechanisms and instruments, and governance structures, and management and leadership styles (Sullivan et al. 2012; Agranoff and McGuire 2003). This in essence support the operation of inter-organisational collaborative forms. According to Sullivan et al. (2012), two key emerging ideas from managerial design of networks include collaborative process. Collaborative process can be steered in an organise and deliberate pattern such that public institutions and players occupy a leading but more peripheral role in these management process. Consequently, network governance sets out to organise collective action by facilitating the coordination of the interaction of dialogue and experimentation as well the process that lead to the learning and development of shared knowledge (Klijin and Koppenjan 2000).

Conversely, the collaborative strategic management is more integrated and a comprehensive approach, making it possible to manage but to also organise, the collaboration at different phases of the development of and implementation of partnership strategies (Favorea et al. 2016; Joyce 2015; Robertson and Choi 2012). Furthermore, the collaborative approach induces a transformation of the role of the public managers and officials, whose action becomes more peripheral and less interventionist (Favorea et al. 2016). This Favorea et al. (2016) stance align with McGuire (2006), and Klijin and Koppenjan (2000) assertion on collaborative strategic management. According to these scholars, (McGuire 2006; and Klijin and Koppenjan 2000), the public players, with its resources and legitimacy, take central as the organization responsible for the creating, organising, and steering interactions within and between organisations, aimed at achieving public goals.

Summarily, the rational and political approach with the observed criticism in public sector administration appear suitable in this study that aim to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. However, it is right to state categorically that the collaborative strategic management and network governance approach is more suitable and can be deployed to manage nationalized oil companies such as NNPC that operate in a dynamic and complex business environment. This is because this approach is more integrated and comprehensive in nature, hence, making it possible to manage, organise, the collaboration at different phases of the development of and implementation of partnership strategies.

3.3 Strategy Frameworks and tools

The practical framework refers to approaches deployed to analyse environmental forces that influence organisations’ operations. These approaches include Balanced Scorecared, OKR (objectives and Key Results), PESTEL, SWOT, Porter's 5 Forces model, and Resource-based View (RBV). PESTEL refers to the political, economic, social, technological, environmental, and legal framework), while SWOT focuses on Strength, Weakness, Opportunities and Threat within and outside of an organisation (Capobianco et at. 2021; Jafari and Soleiman 2020; Koshesh and Jafari 2019; Mahardika 2018).

These scholars point out that academics and industry practitioners deploy these approaches to identify environmental forces in organisations, the petroleum industry included, particularly, the NNPC that operate in the emerging economy.

- The Balanced Scorecard (BSC)

This is a performance management system that is designed to incorporate tangible and intangible elements utilising four interconnected constructs: Financial, Customers, Internal Process, Learning and Growth of an organisation (Guix and Font 2020; Zhou et al. 2020; Kefe 2019; Al-Qubaisi and Ajmal 2018; Sharifkhani et al. 2016; Rabbani et al. 2014; Kaplan 2012). These scholars point out that each of this construct builds into the organisation’s vision and strategy, and contains a set of objectives, measures, targets, and initiaves. According to these scholars, building these into hierarchies creates the cause-and-effect chains that link indicators from differenct contructs that holistically express the performance of the organisation.

The balance scorecared seek to address the question of (1) how customers perceive us, (2) what we excel at, (3) can we continue to improve and create value, and (4) how do we llok to shareholders (Kaplan 2012). Nevertheless, the effectiveness of BSC is underpinned by how it is interpreted and adapted within with the organisation (Madsen and Stenheim 2014). Similarly, effective use of the BSC still fails to focus on all the material issues of stakeholders because the BSC responds, primarily, to the profit needs of shareholders as scholarly observed (Madsen and Stenheim 2014; Van Der Woerd and Van Der Brink 2004). Furthermore, the application of the BSC in organisation create challenge for strategic drivers and managers in the selection of suitable construct and indicators, in the choice of whether to use only strategic measure or to incorporate non-strategic measures, and lastly, the BSC has difficulties involved in expressing the causal relationship (Madsen and Stenheim 2014; Van Der Woerd and Van Der Brink 2004). The weak cause-and-effect links between objectives lead to sub-optimal use of the BSC by limiting its ability to reflect if the strategy adopted remains viable to achieve the organisation’s target (Madsen and Stenheim 2014; Davis and Albright 2004; Van Der Woerd and Van Der Brink 2004).

Accordingly, the observed weaknesses of the BSC were not found appropriate and applicable to achieving the overall aim of the study, which is to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

- Objectives by Key Results (OKR)

OKR is and acronym for Objectives by Key Result. OKR system is a performance to that help leadership sets, communicates, and monitors quarterly goals and result in an organisation so that all employees work together in one direction (Helmold and Terry 2021; Rao et al 2020; Hao and Yu-Ling 2018). These scholars point out that the goal of OKR is to connect company, team, personal objectives in hierarchical way to measurable results, making all employees work in one unified direction, by employing SMART Objectives methodology. According to Helmold and (Terry 2021), OKR consist of a list of three to five level objectives. According to these scholars, each key objective has a progressive indicator or weighted score of 0 to 100 percent or 0 to 1.0 that shows its achievement.

Observed scholarly (Helmold and Terry 2021; Rao et al 2020; Hao and Yu-Ling 2018) advantages of OKR include:

- ✓ Goal focused company alignment, that is, align with your leadership team on top priorities and highest leverage activities each quarter
- ✓ Fit objective into company vision, mission, and values to motivate your company with purpose.
- ✓ Visibility into company, department, and individual progress, wins and road blocked areas.

According to Chotiganta (2021), OKR is one of the most effective goal setting tools of the 21st centuary and it is utilized by leaders to communicate what they want to achieve, and the what milestones you need to meet in order to accomplish it. Nevertheless, these scholars (Chotiganta 2021; Helmold and Terry 2021; Rao et al 2020; Hao and Yu-Ling 2018) mentioned the disadvantages of OKR to include:

- ✓ Determining how specific OKR should be?
- ✓ How to measure OKRs
- ✓ Setting ambitious yet attainable goals
- ✓ How to keep OKRs relevant

- ✓ How often managers should set OKRs

Accordingly, these observed disadvantages of OKR makes its application in this study unsuitable. This is because this study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability.

- The PESTEL framework

The PESTEL framework is an analytical tool that gives an overview of political, economic, socio-cultural, technological, environmental, and legal factors that the organisation does not control, even though they influence growth strategy in an organisation (Capobianco et at. 2021; Jafari and Soleiman 2020; Koshesh and Jafari 2019; Mahardika 2018; Clegg et al. 2017; Lynch 2012). However, this study focuses on evaluating both controllable and uncontrollable forces (internal and external forces) that influence the organisation's growth and the response of the organisation to such elements to ensure growth and profitability. Accordingly, the PESTEL constructs are not suitable for this study being limited in addressing both internal and external environmental forces that impact on growth strategy and profitability.

- Resource-Based View (RBV)

Resource-Based View (RBV) refers to the potential that a firm has that contributes to the growth of the firm and makes it competitive in the industry (Olajide et al. 2019; Bastian et al. 2018; Hang and Thang 2018; Johnson et al. 2014; Ferreira et al*.* 2011; Barney 2007; Crane and Bodie 1996). According to these scholars, the resource consists of human capital, financial capability, and materials. Furthermore, these scholars point out that RBV aims to achieve sustainable growth by creating value for the consumer and being supported by the firm's management. RBV recognises that each organisation possesses a unique collection of resources and abilities. Thus, exploiting these differences to achieve profitability is the focus of this model (Olajide et al. 2019; Bastian et al. 2018; Hang and Thang 2018; Clegg et al. 2017; Johnson et al. 2014; Ferreira et al*.* 2011; Barney 2007; Crane and Bodie 1996). However, Johnson et al. (2014) further assert that resource availability and competence do not guarantee profitability and growth. Rather the critical interaction between systems, processes, people, and innovative capabilities in dealing with the market are variables that impact achieving profitability. In addition, resources and competitive advantage constitute only parts or elements of the overall environmental forces determining growth in the oil and gas industry. Consequently, the applicability of the RBV will be limiting the exploration of other significant elements such as technology, organisation structure and others, hence narrowing the focus of the evaluation to two (2) major components which will not be all-encompassing.

- The Porter 5 forces

Porter (1991) assert that 5 Forces determine the industry's attractiveness and profitability which include bargaining power of the customer or buyer power, the bargaining power of supplier, the threat of new entrants, the threat of substitutes, and finally, the intensity of competitive rivalry (Basile et al. 2021; Awolusi and Atiku 2019; Taha 2018; Cole 2016; Yunna and Yisheng 2014; Hakroh 2014).

These scholars argue that Porter 5 forces mainly concern the factors organisations need to focus on to understand the competitive environment to gain a competitive advantage for profitability. Adopting this framework will lead to the achievement of part of the aim while neglecting external factors such as legal framework, politics, climate change, and others that are not within the organisation's control yet have a significant influence on their operation and influence their growth.

There are several other theories of strategy and strategic management in social science research (Neuman 2006). Theories such as Stakeholder's Theory, Institutional Theory, amongst others that can explain the process of strategy formulation, implementation, and evaluation in strategic management. Each of these theoretical models has its distinct features and contribution to this study.

- The Stakeholder Theory

The Stakeholder Theory is presented by Freeman (1984) as a theory for the strategic management of organisations in the late twentieth century. The importance of this theory was further enhanced by the works of Clarkson (1994, 1995), Donaldson and Preston (1995), Mitchell et al. (1997), Rowley (1997), Frooman (1999) and a recent addition by Emerson et al. (2011), providing both theoretical depth and development to the model. This theory features three factors (descriptive, instrumental, and normative dimensions) to make strategic decisions by the firm. *Descriptive* focuses on the corporate variables driving the firm's behaviour vis-à-vis stakeholders and the management perception of responsibility to stakeholders. *Instrumentalism* is concerned with a critical examination of the outcome of stakeholder's management in terms of financial and social performance, organisational learning, and innovation. *Normative dimensions* reflect the features of descriptive and instrumentalism, thus providing a prescriptive tool in management. The stakeholder's theory of strategic management critically examines the firm within multiple forms of relationships and opine that assigning appropriate consideration to all the legitimate stakeholders is essential to achieving economic growth and enhanced performance (Laplume et al. (2008); Berrone et al. (2007); Ruf et al. (2001); Argandona (1998); Donaldson and Preston (1995). According to Kaler (2006), those with a legitimate claim on a firm's actions are its stakeholders; these include the customers, employees, competitors, suppliers, the government, the host community, and other actors in the business environment. The interaction of these actors within and outside the firm's operations contributes to the firm's success in the long term. However, suppose a stakeholder's relationship within and outside of the firm negatively affects the firm's operations. In that case, this could constitute a challenge to its overall attainment of either commercial or non-commercial objectives (O' Higgins 2010). Although the stakeholder model identifies systematic attention as a practice adopted by the firms aimed at meeting the stakeholder's interest to maximise economic growth, this model does not define the boundaries of what constitutes a stakeholder group as well as stating the criteria for attributing individual membership of one or another group. This gap creates a conflict of interest and a challenge in making operating decisions relating to the multiple stakeholder's objectives and attaining the long-term direction of an organisation (Emerson et al. 2011). Friedman and Mills (2002) argue that stakeholder theory lacks appreciation for the firm/stakeholder relationships that occur; the degree to which such a relationship changes over time, and how and why such changes occur. There is growing attention to integrating the stakeholder theory with other traditional and practical conceptual frameworks like the PESTEL and RBV. This integration aims to create a robust framework that take cognizance of environmental forces and the constructs of the stakeholder theory. However, the stakeholder model superficially captures this study's essence, aiming to critically evaluate the impact of environmental forces on the NNPC’s s growth strategy in the oil and gas industry. Accordingly, this study will not apply stakeholder theory in this study because of the observed limitation. Thus, the need to review other theory such as the institutional theory.

- The institutional theory

This study analysed the institutional theory based on its elements of Isomorphism and Decoupling, which appear relevant to the research aim and objectives. According to Dimaggio and Powell (1983), the institutional theory focuses on regulations, normative and cultural-cognitive factors, together with associated activities and organisation's resources, providing a form of stability and meaning to social life. Dimaggio and Powell (1983) defined the institutional element of Isomorphism as a constraining process that forces one unit in a population to resemble another unit that faces the same set of environmental factors. Isomorphism is further categorised into competitive and institutional features in a bid for organisations competing not only for resources and customers but also for political power, legitimacy, social relevance, and commercial and commercial fitness (Dimaggio and Powell 1983). Isomorphism occurs through the predictors of the political (government), the mimetic (lesson learned), and the normative (professionalism). Conversely, decoupling is concerned with the difference between what the organisation declares it is doing over against its actual professional practice based on its ethical and unethical disposition, perceived self-checking, protectionism built on trust and legitimacy (Dimaggio and Powell 1983).

The institutional theory reflects some of the strategy content (the what) and process (the how) and the variables of global and environmental factors like legal, stakeholders, organisation structure and systems, professionalism, normative pressures, and skill set. This model is also unique and provides a theoretical association with stakeholder management in a dynamic business environment. Nevertheless, there are drawbacks to this theory, as little observation is paid to the context (the why), and the perspective of the strategy process (strategy formulation and implementation). Another element, like "decoupling" and "imitate" that is emphasised in this theory, is also not a core component of this study. Thus, this theoretical model is not appropriate for the required constructs selected for analysis in this study. This study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability.

The above practical framework and theories are deployed to analyse environmental forces that influence organisations’ operations. Nevertheless, there are observed limitations in their application in a bid to conduct clinical analysis of an organisation. Thus, these frameworks were found inappropriate for the required analysis in this study. This is because the study aims is to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. This implies that this study revolves around the change management domain.

Accordingly, the next section of the study explores the implementation and change management models that appear to align with this study aim (section 1.3).

3.3.1 Strategy Implementation Process in the Oil and Gas Industry

Hussey (1997) asserts that strategic change only happens when an appropriate strategy is formulated and implemented. Surveys jointly undertaken by Harvard Business School and Renaissance Solution Inc. found inadequate linkages between strategic decisions and implementation. Clegg et al. (2017); Grant (2016) also attest to this view by endorsing strategy formulation as a core function of top management in any organisation. However, its effectiveness can only be attained through implementation. Nevertheless, a strategy can be deliberately aborted if it is evidenced that resources do not match the capability to achieve a strategic fit (Johnson et al. 2018). Taylor (1994) recommended an implementation framework that points out that an organisation can respond to environmental forces while the employees conduct their normal business activities. He points out that this can be achieved by simplifying work processes and the application of a vision-driven approach to crucial processes. Taylor's stance is underpinned by the assumption that improvement in normal business activities will drive efficiency to between 10%-20% while work process simplification leads to 100% improvement, and finally, re-engineering will create a 1000% organisation's improvement. The construct of Taylor (1994) implementation framework appears to reduce resistance to forces against change within the organisation. Nevertheless, it provided an inadequate discussion on contextual issues that influence the framework.

Similarly, Okumus (2001), points out that a successful implementation process requires a critical review of the variable of "strategy formulation", "environmental uncertainty", "organisational structure", "culture", "operational planning", "communication", "resource allocation", "people", "control", and "outcome". Okumus' (2001) assertion is informed by the weakness of the work of previous scholars (Waterman et al. 1980; Stonich 1982; Hrebinlak and Joyce 1984; Galbraith and Kazanjian 1986; Hambrick and Cannella 1989; Pettigrew and Whip 1991; Skivington and Daft 1991; Roth et al. 1991; Hrebiniak 1992; Yip 1992; Bryson and Bromiley 1993; Schemelzer and Olsen 1994; Aaker 1995; Thomson and Strickland 1995; Miller and Bryson 1997). These previous scholar's work lack in-depth discourse and critical evaluation on how these variables interact with each other, the influence on other variables, how this interaction impact on, the influence on the whole implementation process, and finally, achieving the desired outcome (Alexander 1991; Noble 1999). Extraction from these identified ten implementation variables led to their grouping into three constructs of "content", "context", "process" to achieve the desired outcome (Okumus 2001). Nevertheless, critical analysis of research areas in the field of strategic management reveals that these earlier researchers adopted these identified implementation variables from Pettigrew's work on managing strategic change in an organisation (Pettigrew et al. 1992; Pettigrew 1985). Nevertheless, there is no consensus as to which of these variables should be mapped into each of these distinct groupings.

Accordingly, the next section will explore change management that are relevant to this study.

3.4. Change Management models

Change management models are concepts, theories and methodologies employed to provide indepth approach to organisational change (Johnson et al. 2018; Grant 2016). These change management models aim to provde a guide to making changes, navigating the transformation process, and ensuring that oranisation's mission, vision, and gaoal is achieved in the context of change management (Basile and Vona 2021; Chotiganta 2021; Rao et al. 2020; Tang 2019; Araujo and Leoneti 2018; Johnson et al. 2018; Thomson et al. 2017; Grant 2016). Notable amongst these models are Lewin's change model, McKinsey 7-S model, Nudge theory, ADKER change management model, Nudge theory, Game theory, Kotter's theory, Deming Cycle (PDCA) model, Rational-analytical approach, Emergent planned approach, Pettigrew (1988) model (Basile and Vona 2021; Chotiganta 2021; Rao et al. 2020; Tang 2019; Araujo and Leoneti 2018; Johnson et al. 2018; Thomson et al. 2017; Grant 2016).

Accordingly, this study will focus on the relevant change management models that appear and align with this study aim which is to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

- The rational-analytic approach

According to Pettigrew (1977), the study of strategy formulation involves critical analyses of distinct and verifiable decision events, the route to, and the result of those decisions events, together with the linkages between successful decisions over some time. Similarly, Thomson et al. (2017) opine that formulating strategies entails the processes undertaken by top management to formally plan systems, seizing the opportunities and reacting to the environment in a bid to achieve the set direction (Alkhafaji and Nelson 2013). Nevertheless, there is a considerable discourse in strategic management literature concerning the most appropriate approach to strategy formulation in organisations (Grant 2016). Some scholars claim and seek to formulate strategy through the rational, systematic process. Nevertheless, other scholars are of the view that the best approach to strategy formulation in a dynamic business environment is to respond to phenomena while also paying attention to the organisation's goals, mission, vision, values, objectives, and strategic statement (Johnson et al. 2018; Grant 2016).

The rational-analytic approach of strategy formulation is the generally accepted traditional account. The rational-analytic approach entails strategy formulation through rational and analytical processes. This is typically undertaken by top management in the organisation following a linear sequence (Johnson et al. 2018; Clegg et al. 2017; Grant 2016). These processes result in the organisation's strategic plan detailing elements such as strategic statement, mission, vision, macro-environmental analysis, industry analysis, capability analysis, strategic options that will be evaluated, the proposed strategies, and critical actions. Similarly, given that this approach is intended and evidence-based, it is preferred by the organisation's stakeholders, e.g., the government, employees, top management, host communities, and pressure groups. However, this intended approach can often succeed in a stable market where the impact of environmental factors is minimal, as observed by the advocates of this approach.

The basic assumption underpinning the rational-analytic approach is that strategies are deliberate choices or are naturally intended. Lewin (1977) argues that there is a considerable agreement that change is constant and present in all organisations (Lewin 2012). This is the case of the NNPC that operates in a complex and volatile oil and gas environment (Akinola 2018; Nwokeji 2007). Accordingly, unless top management can manage change rationally, an organisation is likely to experience strategic issues identified in section 2.4. The body of practice employed by an organisation to moderate a planned change is referred to as change management (Lewin 2012). Furthermore, Lewin (2012) points out that the focus of change management is on people in a bid to implement intended change successfully.

Grundy (1993) identifies three types of change peculiar to organisations ("smooth incremental change," "bumpy incremental change," and "discontinuous change"). "Smooth incremental change" evolves gradually in a systematic pattern and predictable manner (e.g., annual reviews of product features and product pricing). "Bumpy incremental change" is followed by periods of relative inaction that is interrupted by stimulation in the pace of change. Grundy (1993) asserts that the "bumpy incremental change" is triggered by pressures caused by environmental forces such as reorganisation, desire to improve efficiency, attainment of commercial and non-commercial objectives. "Discontinuous change" viewed as change that is remarkable by the rapid shift in strategy, organisation culture, and structure (e.g., merger and acquisition, joint venture, and even shutdown).

Furthermore, Strebel (1996) observes a different type of change known as the divergent breakpoint. The divergent breakpoint type of change resulting from the discovery of entirely new business opportunities. Clegg et al. (2017) suggest that customers and stakeholders want to change based on their desire for new features, convenience, and a return on investment. In response, firms change to avoid strategic drift. Strategic drift is viewed as a gradual deterioration in the firm's performance as a result of failure to create necessary change (Johnson et al. 2014). Grant (2016) argues that firms have always had to deal with change and react to pressures through their strategic change technique. Strategic change involves a change in the direction and scope of an organisation over the long term (Johnson et al. 2014; Clegg et al. 2017; Johnson et al. 2002).

Nevertheless, these scholars were quick to observe that not all organisational change is labelled "strategic". Rather changes may involve a shift in the commercial and non-commercial objectives, diversification, innovation, integration, merger, acquisition, strategic alliance, and geographical expansion. Thus, change management is the process of continually realigning the structure and goals of the organisation and its stakeholders to meet internal and external demands on the organisation. However, Kotter and Schlesinger (1979) argue that employees and departments naturally work towards change from being effective, thus maintaining the status quo. This employee's stance is attributed to low tolerance for change", "parochial self-interest," "misunderstanding and lack of trust," and "different assessment" as the critical justification for change resistance (Kotter and Schlesinger 1979). However, Kotter and Schlesinger (1979) point out that top managers can employ education and communication, participation and involvement, facilitation and support, negotiation and agreement, manipulation and co-optation, explicit and implicit coercion in dealing with resistance to change.

The rational-analytic approach is based on the planned approach to strategic management; the approach is well developed and supported coherently by a body of strategic management literature such as the work of Lewin (1951), Pettigrew (1988). Nevertheless, this rational-analytic approach is better suited for a stable market where the impact of environmental factors is minimal. This is contrary to the complex and volatile oil and gas environment that NNPC operate, thus making the adoption of this approach questionable. This necessitates the need to review the Lewin (1951) model that has element of managing the complex and volatile oil and gas environment that NNPC operate.

- The Lewin (1951) model

According to King and Anderson (1995), the Lewin (1951) model present a simplistic and practical model for understanding and responding to change processes in an organisation. The model is underpinned by the perception that change is desired based on feedback and results, consequently moving towards the newly established position. This model deploys three steps in understanding and responding to change caused by environmental forces resulting in difficulty in achieving set objectives (Cummings et al. 2016). These steps include: "Unfreezing," "Changing," and "Refreezing." Firstly, "Unfreezing" is concerned with critically identifying and increasing the driving force for change and simultaneously resisting forces against change, defining the outcome, training, and motivating people to get ready to make a change. Lewin (1951) opines that this is the basis of the tool called the Force Field Analysis. Force Field Analysis provides the initial view of change issues that must be managed by critically identifying forces for change in an organisation and the forces against change implementation (Johnson et al. 2014; Lewin 1951).

Nevertheless, the top management is challenged with creating the right balance and conditions for change to proceed amid people's resistance to change. Cummings et al. (2016) observe that people's resistance to change is attributable to the tendency for people to seek a controlled environment that offers safety, a state of belonging, and a sense of identity as against the unknown outcome of change (Lewin 2012). This is referred to as the state of equilibrium or the tendency to return to the status quo. Secondly, the “Changing” step focuses on the execution of the intended change by involving people. This stage requires staff induction, training, coaching, communication, dependencies, and leadership to transit from the "unfreeze" phase. Thirdly, the "Unfreezing" step ensures that change is permanent by establishing a new process, procedures, and reward mechanism. Nevertheless, the drive towards attaining set objectives has made strategic change imperative in the oil and gas industry.

Consequently, further review of the strategic process follows the discourse representing the identified environmental forces (section 2.1.1) that have made change imperative. According to Graetz (2000), environmental forces that impact change situations are called drivers. Graetz (2000) points out that drivers influence growth strategies in an organisation. However, organisations require change enablers to undertake a necessary change in a bid to achieve set objectives. For this study, the required change drivers and change enablers are captured in section 2.4.

Lewin’s (1951) planned approach to strategic management appears to support this study. Nevertheless, the emergent approach scholars opine that pre-planned change ignores the dynamic and unpredictable business environment within which an organisation operates. Hence, it differs from Lewin's planned perspective of "Unfreezing," "Changing," and "refreezing" perspective.

- The emergent approach

The emergent school of thought asserts that change is natural, unpredictable and unfolds based on the interaction of multiple factors within an organisation (Burnes 2004). Canales (2014) further buttresses these views by stating that the genesis of strategy making is revolutionary driven and emerges from autonomous and influenced behaviours due to critical interaction between the drivers in an organisation. urthermore, the emergent approach provides a broad alternative view of how strategies develop in an organisation. According to the advocates of the emergent approach, strategy development is non-linear and beyond the context of the intended or planned approach. According to Henry Mintzberg, as cited by Kanter et al. (1992), strategies tend to develop in an organisation over time in response to specific, incremental, or even accidental action. The emergent approach argues that good ideas and opportunities can emanate from the bottom of an organisation, often from the practical experience of the employees (Johnson et al. 2018; Grant 2016; Child 2005). Furthermore, Grant (2016), observe that the emergent approach to strategy development consents to adaptation and learning through regular interaction between strategy formulation and implementation. Consequently, a strategy is continually modified and reviewed underpinned by the experience of employees in response to environmental forces.

Summarily, the Lewin (1951) model remains well developed and associated with the work of notable scholars such as Alfred Chandler and Michael Porter. Nevertheless, this model is criticised for being too simplistic in managing the change process by Henry Mintzberg as cited by Grant (2016); Clegg et al. (2017); Johnson et al. 2018. Similarly, Child (2005); Kanter et al. (1992), argue that the Lewin (1951) model, exhibits elements of being quaint, rigid and inappropriate in the current dynamic business environment. However, the foundational significance of the Lewin’s (1951) model remains unquestioned, as observed by Cummings et al. (2016); Lewin (2012); Brisson-Bank (2010); King and Anderson (1995). It is vital to address the observed weakness of inflexibility and the increasing uncertainties in the dynamic business environment, particularly in the context of the complex and volatile oil and gas environment, like Nigeria. The study suggests the combination of the rational and emergent approach, considering the ability of both approaches to formulate strategies in response to environmental forces in the oil and gas industry. Accordingly, the combined approach is appropriate for this kind of study that aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability.

Another notable and influential model that followed the work of Lewin (1951) is Kotter's (1996) eight steps series of leading and responding to environmental forces in an organisation.

- Kotter's (1996) eight constructs

Kotter (1996), points out the eight constructs in responding to change as including "create urgency," "powerful coalition," "create a vision for change," "communicate the vision," "remove obstacles," "create short-term wins," "build on the change," and finally, "anchor the changes in the corporate culture." According to Kotter (1996), the construct of "create urgency" captures the development of a sense of urgency around the need for change in response to environmental forces that impact an organisation (section 2.4). For instance, creating scenarios about threats of environmental forces or opportunities that can be exploited. Nevertheless, this is only achievable when the employees are convinced that the status quo is sustainable (Clegg et al. 2018). The construct of a "powerful coalition" refers to the creation of change leaders in the organisation. Powerful coalition captures influential people whose level of power is underpinned by the job role, expertise, skills, and political status. The "create a vision for change" focuses on integrating the various ideas about what could change into an overall vision that employees can understand, and that also sounds viable for the organisation. "Communicate the vision" focus on creating frequent and consistent awareness of the vision to the employees through daily tasks, meetings, and reviews, amongst others. The construct of "remove obstacles" critically examines the resistant forces to change in the organisation. The critical examination aims to communicate the desired outcome of change to the employees through training, motivation, dealing with anxieties, and fear of job loss. The "create short-term wins" construct spells out the need to set an incremental, achievable target that creates a sense of success for the employees while also aiming at the long-term vision of the organisation. According to Kotter (1996), "build on the change," emphasises leveraging on the quick wins to achieve the long-term change of the organisation. This construct entails the analyses of achieved target, improvement mechanism, review of the other constructs, e.g., coalition, communication. It further emphasises that change in an organisation is a continuous process for the employees. Finally, the "anchor the changes in the corporate culture" construct points to the need to completely adhere to the change created. This can be achieved by introducing the change into the core values of the organisation and all aspects of the business activities — for instance, recruitment and selection, training, procedures, values, and strategic processes.

This Kotter (1996) eight steps series is applicable because it considers the uncertainties likely to exist in the complex oil and gas environment by creating a blueprint of risk management steps in response to environmental forces. Nevertheless, the lack of empirical evidence for its efficacy remains a concern in practice (Clegg et al. 2018). Consequently, this observed empirical gap necessitate reviewing other change management model like the McKinsey's 7-S contingency model.

- McKinsey's 7-S contingency model

McKinsey's 7-S contingency model developed by Peters and Waterman (1982), observes seven elements that are requisite for an organisation's success in a dynamic business environment. These elements are: "strategy", "structure", "systems", "staff", "skill", "style" and "shared values". According to Peters and Waterman (1982), "strategy" outlines the action for allocating scarce resources required to achieve the organisation's specific goals. "Structure" is concerned with the organisation's framework and the linkage between the various parts. "Systems" focus on the approved organisation's procedures and processes. "Staff" refers to the employees emphasising task identification and analysis, recruitment and selection, retention, reward and education. "Skills" focus on the unique capabilities acquired by the staff. "Style" focuses on how the management is a pattern. Finally, "shared values" refer to perceptions and norms practised in the organisation. McKinsey's 7-S contingency framework recognises the critical link between the strategy, organisation and environment examined in this study. Thus, the McKinsey's 7-S contingency model appear to guide the analysis of the appropriateness of the decision-making process of the NNPC while providing an in-depth understanding of the existing "strategy", "structure", "systems", "staff", "skill", "style" and "shared values" determining the corporation's selection of growth strategies in response to environmental forces.

There are scholarly assertion that the McKinsey's 7-S contingency model is a useful model for achieving corporate goals and effective than the traditional framework such as PESTEL, SWOT, amongst others that focus on strategy and structure (Leoneti 2018; Johnson et al. 2018; Thomson et al. 2017; Grant 2016). Similarly, these scholars observe that this model facilitate the systematic applications of the policies, regulations, strategies, while also coordinating several departments and processes in an organisation, especially during merger and acquisition. Furthermore, the McKinsey's 7-S contingency model is an important model in the effective tracking of the impact of change in key element of an organisation as scholarly noted (Leoneti 2018; Johnson et al. 2018; Thomson et al. 2017; Grant 2016).

Nevertheless, there are scholarly argument that the McKinsey's 7-S contingency model emphasis more of the internal factors in the analysis of the organisation’s, neglecting the external factors that substantially affect business operations, growth strategy and profitability (Basile and Vona 2021; Chotiganta 2021; Rao et al. 2020; Tang 2019; Araujo and Leoneti 2018; Johnson et al. 2018; Thomson et al. 2017; Grant 2016). Similarly, these scholars point out that the McKinsey's 7-S contingency model does not provide a road map to follow. This is an observed critical drawback of this model considering that it does not give strategic drivers and managers the step by step or any road map to follow for change management program. These scholars opine that the McKinsey's 7-S contingency model is more of a general method to ensue organisational elements are in a balance. Furthermore, other disavantages of this McKinsey's 7-S contingency model include that the model lack enough empirical evidence to support its explanation and also lacking explanation of the concept of organisational effectiveness or performance

(Thomson et al. 2017; Grant 2016). These observed weaknesses of the McKinsey's 7-S contingency model make it unsuitable for this kind of study captures internal and external environmental forces and that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

- Nudge theory

The theory of was originally develop 21st centuary by American behavioural economist Richard Thaler and Case Sunstein and they presented this theory in the renowned book called Nudge – Improving Decisions about Health, Wealth and Happiness which was published in 2008 (Wang et at. 2020; Pietrabissa et al. 2019; Haynes 2017; McClelland 2016; Hall-Ellis 2015; Thaler et al. 2013).

These scholars' content that there exist a "choice architecture" which involves all of the outside forces that subtly guide one's decisions in one direction or another. Given the unavoidable existence of a choice architecture, the crucial next assumption is that choice architect exists as well, that is, a person or collection of persons who design the environment in order to make certain option more likely to be chosen (Wang et at. 2020; Pietrabissa et al. 2019; Haynes 2017; McClelland 2016; Hall-Ellis 2015; Thaler et al. 2013). This implies that Nudge theory refers to a principle that a small action can influence on the choice of people or the way people behave. This theory focuses on engaging people by knowing that how people make choices or make decisions. According to Thaler et al. (2013), theory theory encourages indirect techniques to influence the behaviour instead of giving direct instruction. This theory utilises three actions which are necessary for leading change, namely, perception nudges, motivation nudges, ability and simplicity nudges (Wang et at. 2020; Pietrabissa et al. 2019; Haynes 2017; McClelland 2016; Hall-Ellis 2015; Thaler et al. 2013). Similarly, known techniques include, define change, analysing stakeholders, work plan and timelines, inclusive decision making, receptive to feedback, removing bottlenecks, and finally, consistency.

According to these scholars, this benignly intentioned manipulation is labelled as "libertarian paternalism", meant to improve the directions of people's choice while maintaining freedom of choice chosen (Wang et at. 2020; Pietrabissa et al. 2019; Haynes 2017; McClelland 2016; Hall-Ellis 2015). These scholars point out that this approach aim to reap the benefit of strong organisational and governmental oversigh without the restrictive regulations and negative consequence.

Nudge theory is an emerging theory in change management, nevertheless, limited work has been conducted in this domain. Hence, the efficacy of adjustment in choice of archecture of this theory (Wang et at. 2020). Similarly, previous work in the context of Nudge theory has been speculative and the field has been dominated by an ongoing debate without morality of libertarian paternalism, which consider to be an infridgement of of individual freedom of choice.

Underpinned by these observed weaknesses, this study will not be applying this Nudge theory in this study that aim to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. More-so the strategic drivers and managers of NNPC need clarity of vision that should multi-dimensional communicated in order to achieve set objectives. Thus, the need to explore other change management models.

- ADKAR Model

The ADKAR model was developed by Jeff Hiatt in 2003 and it was introduced as a practical tool by Prosci, a renowned change management consultancy and learning center (Hiatt, 2006). The ADKAR model is mainly intended to be a coaching and change management tool to assist subordinates through the change process within organisations (Shah, 2014). ADKAR is an acronym for Awareness, Desire, Knowledge, Ability, and Reinforcement. ADKAR describes successful change at the individual level and outlines the goals of successful change as leaders have to manage organizational change starts with understanding how to manage with a single subordinate (Tang 2019; Dana et al 2016; Kazmi and Naarananoja 2014; Mulder 2013). These scholars observe that the model deploys five steps as a building block as listed below:

- ✓ To build awareness
  - I. Effective and targeted communications
  - ii. Leaders sharing the why and vision
  - iii. Ready access to information

- ✓ To create desire change
  - i. Leaders demonstrating their commitment
  - ii. Managers and supervisor advocating the
  - iii. Subordinates participation and involvement

- ✓ Desire To develop knowledge
  - i. Effective with the proper context
  - ii. Education for during and after the change
  - iii. Job aides and real-life application

- ✓ To foster ability
  - i. Coaching by managers, supervisors
  - ii. Hands-on exercise, practice, and time
  - iii. Elimination of any potential barriers

- ✓ To Reinforce Change
  - i. Celebrate successes, individually, and as a team
  - ii. Rewards and recognition that is meaningful
  - iii. Feedback on performance and accountability

DAKAR model is a goal-oriented change management model that allows change management teams to focus their activities on specific business results (Tang 2019; Dana et al 2016; Kazmi and Naaralnanoja 2014; Mulder 2013). It was initially used as a tool for determining if change management like communications and training were having the desired results during organizational change. Similarly, ADKAR model captures the business/process dimension of change and the individual dimension of change. As a result, ADKAR model is an effective tool for planning change activities, diagnosing gaps, developing correction action and supporting managers and supervisors (Mulder, 2013)

However, the limitations of this model are the missing out on the role of leadership and principles of program management to create clarity and provide direction on change (Galli 2018; Shah, 2014). This noted limitation makes it unsuitable for this study that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. The intention is to understand the organisation's poor performance and low profitability in order to improve the adoption of sustainable growth strategies that will lead to organisational growth and profitability. The observed limitation necessitates further review of change management model, such the game theory and CCP of Pettigrew (1988) theory.

- The game theory

The game theory is a well-known tool to model the potential conflicts among agents, providing insights on how to negotiate or collaborate under conditions, looking for equilibrium solutions (Arsenyan et al. 2015). Game theory aim to predict the consequences of making potential choices for all players involved in order to select the best possible action (Kelly 2003). According to Souza and Rego (2013), conflicting and cooperative strategic choices could have a huge influence on the agents' outcome in any strategic interaction. The main contribution of game theory approaches are to understand how agent interact strategically under some basic assumption of rationality, and taking into account the expectations of the agents in their choices (Osborne & Rubinstein, 1994).

This theory is employed to deal with organization that operate in complex and volatile business environment (Oliveira et al. 2016; Zhu & Singh, 2016; Arsenyan et al. 2015; Souza and Rego 2013). Accordingly, this theory can be suitably applied to the oil and gas industry that is charaterised as a dynamic business environment dominated by corporate partnerships and joint ventures, huge investment requirements, as well as tight governmental regulations, where the understanding of all these agents' interest is particularly important to solve potential conflicts (Oliveira et al. 2016; Zhu & Singh, 2016; Willigers et al. 2009). Consequently, the process of as allocating capital into the correct portfolio is a critical factor for oil and gas industry when evaluating possible partnerships (Lopes & Almeida 2011). Another source of potential conflicts among partnership is a vertical integration between oil and gas companies and their suppliers, with the goal to share their particular risk and cost (Hamacker & Martins, 2015). Hence, the presence of multiple agents and the impact that each distinct strategy has over the final outcomes makes the oil and gas industry and interesting field for game theory applications.

In this context of this study, game theory models aid in the adequate visualization of the strategic interactions faced by the oil and gas industry, with the main goal of a better understanding of the issues or problems, aiming to improve the decision-making processes. According to Kelly, (2003), the application of game theory helps to identify an intrinsic and particular logical structure, where different frameworks for modeling them exclusively are needed. For social and economic interaction and interdependent decision-making processes, the framework of mixed-motive games, with the specific case of 2x2 symmetric games, are the most used (Kelly 2003). Decanio & Fremstad (2013) mentioned that the 2x2 symmetrical games were summarized by Robinson & Goforth (2005), who proposed to organize and classify these games as a "New Periodic Table" (NPT) in a unified topological framework based on a natural measure of the players' payoff structures.

There are scholarly argument that in order to achieve equilibrium solutions in oil and gas industry, there is need to classify and group this industry players into three main categories: (i) competitive bidding, in which companies usually face strong competition among themselves in bids or auctions for the oil and gas exploration opportunities; (ii) negotiation between partners, allowing the companies to look at the negotiation from all possible sides, discovering key trade-offs and accepting terms to create win-win solutions; and (iii) joint ventures and partnership, in which oil and gas companies need to evaluate cooperation initiatives with their competitors, governments, investors and others, in order to understand their partners and develop strategics to achieve the best outcome. Willigers et al. (2009) added two other potential practical applications: (iv) rivalry between service providers, whereby service companies generally compete to be suppliers of oil and gas companies and should decide their strategies based on the relationship between profitability and risks of losing the bids; and (v) employee unions relationship, whereby oil and gas employees and cooperate management might have conflicting objectives, both parties should understand each other and cooperate to maintain business sustainability.

Although, this game theory appears suitable for this kind of study that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. This theory is limited on the assumptions that players have the knowledge about their own pay-offs and pay-offs of others is not practical (Decanio and Fremstad 2013; Willigers et al. 2009; Kelly, 2003). Similarly, these scholars point out that the techniques of employed in solving games involving mixed strategies particularly in case of large pay-off matrix is very complicated. Further, these scholars believe that all the competitive problems cannot be analysed with the help of game theory. This limitation makes the application of the game theory in this study difficult.

It is on this note that study explore another model that appear to align with study aim.

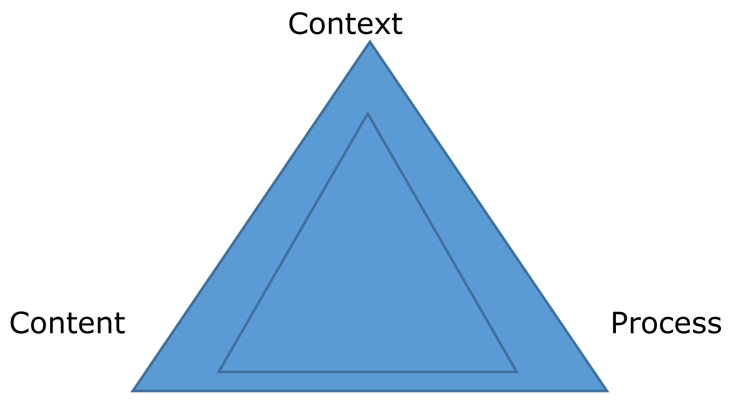
- The CCP of Pettigrew (1988) theory

Another theory of note is the CCP Pettigrew (1988) theory. Accordingly, this study observes that the most developed and suitable discussion on strategic change management process aligns with the work of Pettigrew (1988).

The Pettigrew (1988) model captures “content”, “context”, “process” (CCP) of change and its impact on an organisation. Accordingly, this study adopts the CCP model of Pettigrew (1988), having presented a holistic approach for investigating an organisation's growth strategy in response to environmental forces. The CCP model of Pettigrew (1988) is robust to accommodate the discourse relating to the impact of environmental forces. The robustness of this model of allows its application in a volatile oil and gas business environment through its three constructs of "content," "context," "process" (CCP) of change. Accordingly, inferring that response to change process involves not only the “content” of preferred strategy, or the “contexts” in which it occurs, but also the management of the change "process".

The CCP of Pettigrew (1988) theory of strategic change is presented in figure 7.

Figure 6: The CCP of Pettigrew (1988) theory of strategic change



Source: Pettigrew (1988)

The CCP Pettigrew (1988) theory appear to align with this research study given the three constructs of "content", "context", and "process". Accordingly, this study employs Pettigrew (1988) three lens constructs to test the applicability and suitability in an organisation such as the NNPC that operates in an emerging economy like Nigeria being the case study of the research study. The selection of Pettigrew (1988) three lens theory is strengthened by its ability to present a holistic approach for investigating an organisation's growth strategy in response to the impact of environmental forces (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Grant 2016; Pettigrew 1992).

3.4.2 The content of strategic change

An understanding of *what* is being analysed in any evaluation studies is important. According to Stockdale and Standing (2006) a decision on *what* should be evaluated should be influenced by the stakeholders (Guba and Lincoln 1989) and the context of the organisation. The "content" dimension of strategic change focuses on the strategic direction of the organisation, the need to design a new strategy and source of the strategy (Pettigrew 1988). According to Ziaee et al. (2017), a critical factor in undertaking any evaluation study is a detailed understanding of *what* is being evaluated. This study aims to critically evaluate the impact of environmental forces on NNPC's growth strategy. The evaluation of the impact of environmental forces on NNPC's growth strategy was conducted by undertaking a review of the strategic direction captured in the policy documents within different levels or categories in the organisation. For instance, corporate level, business level, functional level strategy (Johnson et al. 2018 Grant 2016) as this is the context within which the NNPC operates (Stockdale and Standing 2006).

A more recent addition to this strategy level categorsation is the network strategy level (Ziaee et al. 2017; Wheelen and Hunger 2011; Wit et al. 2010). The network-level is a situation where two or more organisations progress beyond common transactional relationships and get involved in collaborative relationships (Ziaee et al. 2017; Wheelen and Hunger 2011; Wit et al. 2010). The emphasis of network strategy is achieving a shared goal by an organisation working jointly, as observed by Kohtamäki et al. (2013).

To respond to the impact of environmental forces influencing the growth strategy of the NNPC, content strategy affects the organisations business processes and performance (Reimer 2002) as it captures the strategies, approaches and methods adopted by an organisation (Brocke and Simons 2008).

Therefore, the strategic direction of the organisation was analysed, guided by the top management and the NASS members who are the major stakeholders in the NNPC (Stockdale and Standing 2006). The content guiding the organisation's activities was evaluated at the four levels of content strategy to provide an understanding of the 12 key business goals (Appendix 5) and the processes and challenges faced in achieving NNPC's commercial and non-commercial objectives (NNPC 2018). This was undertaking using the approaches and methods contained in the content strategy (Brocke and Simons 2008).

3.4.3 The context of the strategic change process

The context of an organisation determines the reason for evaluation *why* as well as the stakeholders *who* will be involved in the evaluation (Avgerou 2001). According to Paton and McCalman (2008), changes in an organisation are informed by the response to environmental forces. These environmental forces influence the effectiveness of the organisation's growth strategy. Pettigrew's (1988) model points out that two dimensions of "contexts" is advised while undertaking a critical evaluation of change in an organisation. Pettigrew (1988) categorises the "context" into inner and outer contexts. This categorisation aid in a holistic analysis of the dynamic business environment in which an organisation operates. The inner contexts are variables within the organisation from which ideas for change emanate. The inner contexts consist of strategic direction, organisational structure, corporate culture, power, trust, and transparency within an organisation that triggers change.

Conversely, the outer contexts capture the variables from outside of the organisation. For instance, political, economic, technological, environmental, regulations, ownership structure, risk, and critical success factors in which an organisation operates. These inner and outer context variables support and influence the change implementation process. Accordingly, the "why" of strategic change is derived from analysis of the "inner and outer contexts" of the organisation, the "what" of strategic change enveloped under "content," and the "how" of strategic change can be understood from critical analysis of the "process" (Pettigrew 1988; Whipp et al. 1989; Pye and Pettigrew 2005).

In retrospect, the inner context variables of NNPC are captured in the twelve (12) key business focus areas (NNPC 2017). The twelve business focus areas include security, new business models, JV cash calls management, production, and reserve growth, NPDC growth, gas development, refinery upgrade and expansion, renewable energy and frontier exploration, oil and gas, ventures and common services, professionalism and accountability, and finally, staff welfare (NNPC 2018). The twelve key business focus areas are underpinned by the drive towards the attainment of commercial and non-commercial objectives of NNPC. Nevertheless, the attainment of these objectives is challenged by outer context variables, e.g., government interference, political uncertainty, stakeholder's reinforcement, skilled human asset gap, obsolete technology, corruption, and gaps in operational procedures (Akinola 2018; Akinrele 2016). The interaction between the business focus areas and environmental forces has triggered the need for strategic change management in the NNPC's operations. Although the purpose of evaluation may be for appraisal of value (Smithson and Hirschheim 1998), a measure of success or identification of benefits, it can also be used to reinforce existing organisation structures for social and political benefit. In the case of this study the evaluation seeks to reinforce organisational structure for global economic benefits. However, Boulmetis and Dutwin (2000) argue that due to the power associated with stakeholder groups, effective evaluations depend on the stakeholders' overall perception and belief. Thus, the context of the organisation which involves stakeholders was evaluated to understand the influence of their perception and beliefs on the impact of environmental forces on the organisation, and the influence of these views on the current growth strategies of the NNPC.

3.4.4 The process of strategic change

According to Pettigrew (1996) the evaluation of process of strategic change has been narrow, thus, reflective in the inadequate explicit discourse on process analysis in strategic change. Pettigrew and Whipp (1991) assert that the "process" of strategy evaluation involves an analysis of the existing gaps between strategy formulation and implementation, "how" and "why" defined periods of change and continuity can be distinguished over time in the overall change pattern of strategic development in an organisation. Self et al. (2007) in support of the authors views the "process" of strategic change as sets of actions and interactions primarily deployed and directly involved in strategy implementation in an organisational change process. A key factor to be considered in the "process" analysis is the business model and the role of business models employed in the implementation process (Pettigrew 1988). The business model in this study refers to a theoretical construct that aids the analysis of a complex structure to make meaning of the underlying event (Neuman 2006). Pettigrew (1988) further points out that the "process" construct seeks to progress the organisation from the current state to the desired outcome. Pettigrew et al. (1992) process strategy further examines the differences between context (inner and outer) and process to understand different performance outcomes. Therefore, Hussey (1997) points out the inherent implementation problems in an organisation's strategic change implementation process, as captured in table 4.

Table 4: Implementation Problems.

S/N	PROBLEMS
1	Implementation took a longer time than expected
2	Major unexpected problems arose during the implementation
3	Inadequate coordination of implementation activities
4	Other activities distracted attention
5	Inadequate capabilities of employees
6	Inadequate training at lower levels
7	Uncontrollable external factors
8	Inadequate leadership and direction at departmental levels
9	Implementation task not fully defined
10	Inadequate information systems to monitor
11	Employees resistance (incongruent goals)
12	Lack of teamwork by people
13	Overall goals not understood by employees

Source: Author generated based on analyses of Hussey 1997; Alexander 1985.

However, David et al. (2003) suggest that successful strategy implementation can be achieved if cognisance is given to some of these factors stated in table 5.

Table 5: Implementation solutions

S/N	SOLUTIONS
1	Communication (information)
2	Start with good concept or idea and right people
3	Obtain employees commitment and involvement
4	Provide sufficient resources
5	Reward and penalties system
6	Develop an implementation plan
7	Recognise an organisation's structure and culture

Source: Author generated based on the analyses of David et al. 2003; Hussey 1997; Alexander 1985.

Similarly, Kotter and Schlesinger (1979), observe that implementing strategic decision require the persuasion, education and communication, participation, negotiation and involvement, support, and agreement of the organisation's employees. Van de Ven (1992) also highlights the evaluation of a sequence of events and how things change overtime, thus allowing an evaluation of historical developments and events overtime.

Thus, the process of strategy in this study was guided by three (3) of Pettigrew's five (5) assumptions of strategy process research in support of Van de Ven (1992) from the Warwick process. Three of the assumptions were found suitable to achieving the aim of this study as the remaining two (2) assumptions focus on investigating issues in a comparative and longitudinal study, of which this study does not seek to explore:

1. Embeddedness; strategic choices and changes are investigated and evaluated as embedded aspects of the inner (structure, culture, and political environment) and outer (economic, social, competitive and environment in which the corporation is located) context of the organisation. Evaluation at this level recognises the different levels of process analysis to include firm

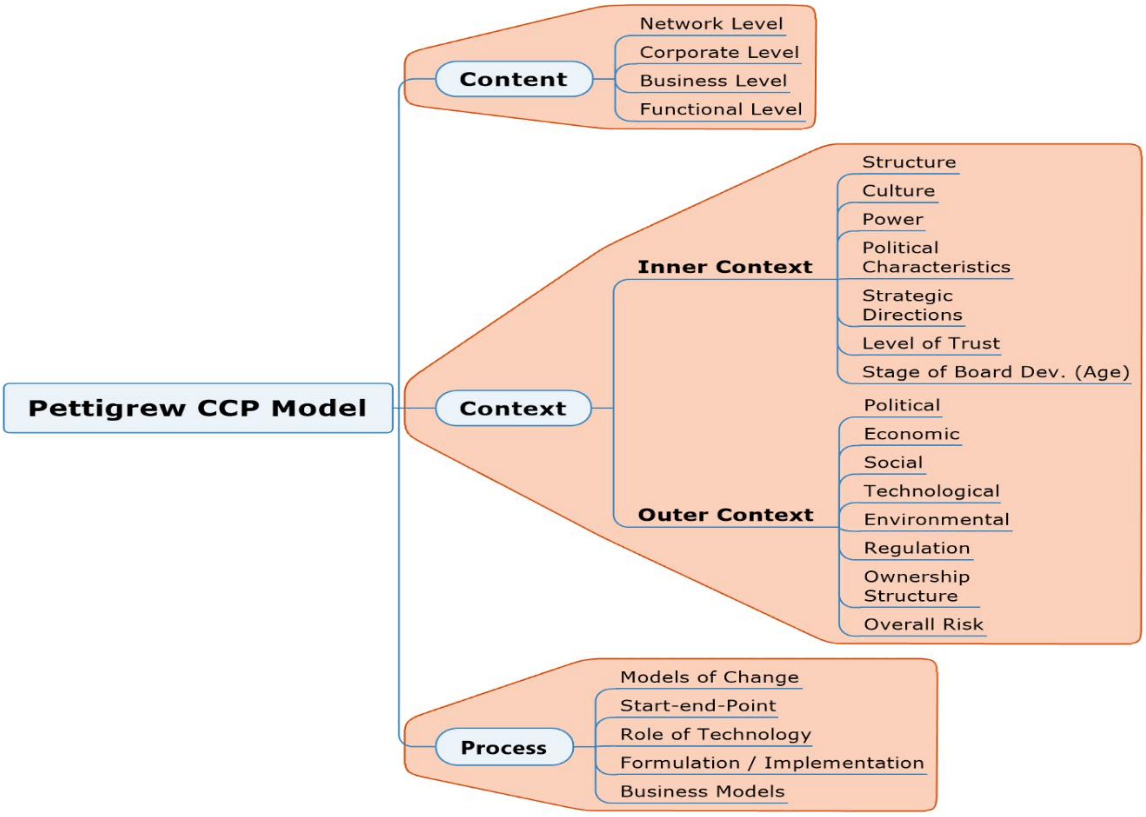
and sector level and technological development. The process, momentum, pace (slow or fast), and path in which these changes occur at each level provide an understanding of the firm's relative rate and adjustment process, which may lead to their loss or gain of competitive advantage.

2. Interconnectedness: Recurrent patterns will be searched in the growth and profitability history of the NNPC to understand the chronology of events in the past, the current processes and shape the emerging future.
3. Context and action are intertwined; hence context is nested in the action of learning, perception, and recall, which shape the overall process. Thus, the organisation's learning, perception, and recall in terms of its traditional and technological commitment will be evaluated with relevance to their involvement in the corporation's productivity.

Underpinned by the robustness and the suitability of The CCP Pettigrew (1988) theory. This theory will be deployed to gain in-depth insight into the relevance of the current growth strategies adopted by the NNPC to achieve growth strategy and profitability, this will be achieved by comparing current practices to the constructs in Pettigrew’s CCP theory.

Accordingly, the study present Pettigrew’s CCP constructs that underpin the research, as shown in figure 8.

Figure 7: The Pettigrew's CCP constructs underpinning this study



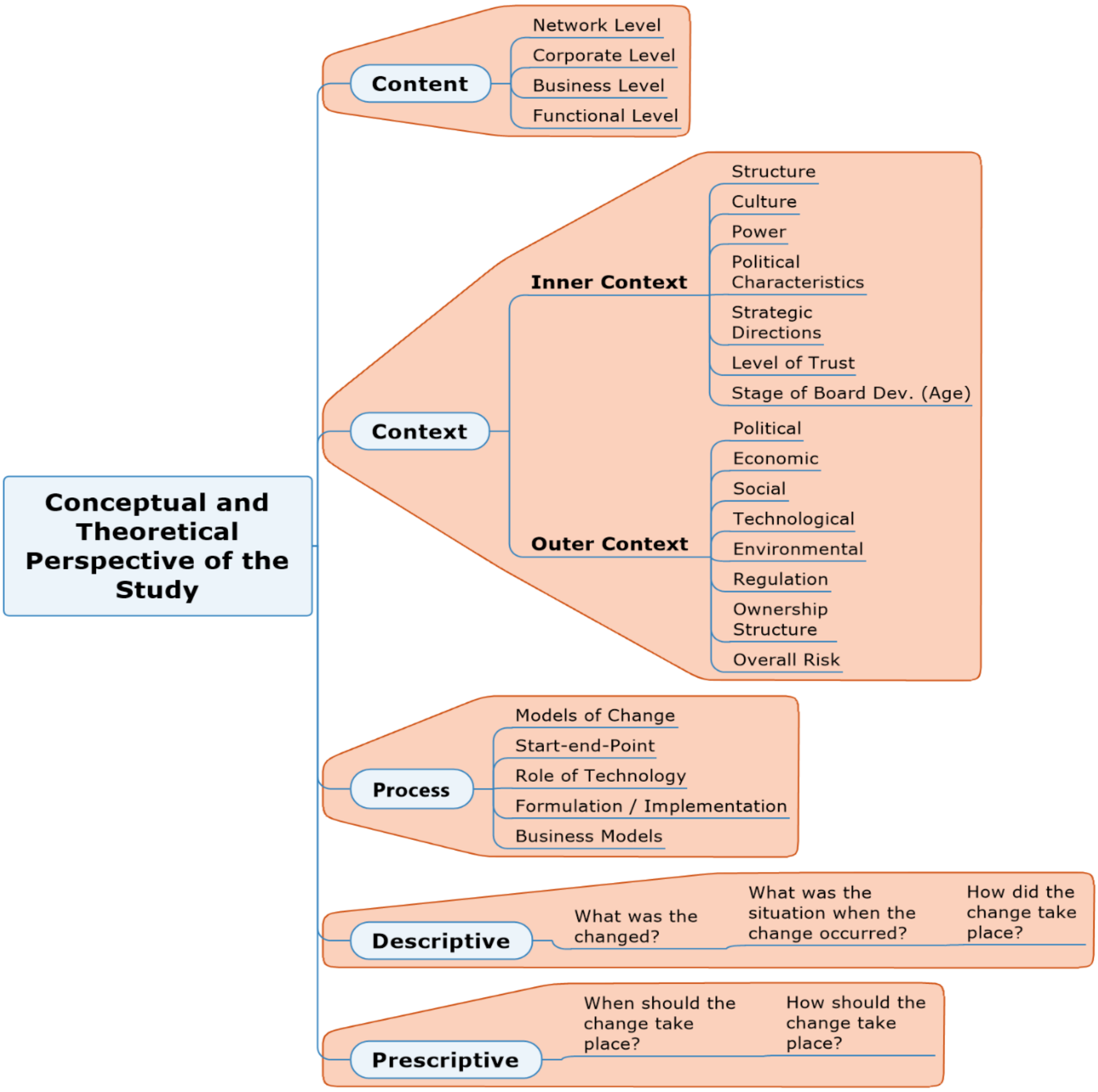
Source: Author generated based on The CCP Pettigrew (1988) model.

Furthermore, along with the constructs of "content", "context", and "process", two additional constructs will be considered to enhance the practical application of this theory and, address the study's objective 4. These other constructs provide details of the research contribution that set out to be either "prescriptive" or "descriptive".

The Prescriptive concept focus is to recommend ideas and how organisational transformation can be undertaken. The prescriptive construct becomes necessary given the complex and dynamic environment in which organisations operate (Johnson et al. 2018; Clegg et al. 2017; Thomson et al. 2017; Grant 2016; Eggart et al. 2014), as is the case of NNPC, Nigeria. Contrarily, the "descriptive" is concerned with establishing theories and how strategic change has taken place. Therefore, "descriptive" research study is in contrast to normative "prescriptive" research study that is mainly concerned with questions on how reality should be. Nevertheless, these divergences are complementary and interlinked (Bigdeli et al. 2017). Interesting, academics and researchers are attracted to descriptive research contributions to understand the social world that either people or organisations operate, whereas, industry practitioners tend to be drawn more towards prescriptiveness to solve strategic issues or business problems.

Figure 9, below is a comprehensive perspective of the proposed framework for this research study.

Figure 8: Proposed framework of the research study.



Source: Bigdeli et al. (2017)

The Pettigrew (1988) CCP constructs will be compared to the identified themes and sub-themes from the data collected from the emerging economy context in the subsequent chapters of this study.

3.4.5 Weaknesses of Pettigrew (1988) CCP Theory.

Although, this study adopts the Pettigrew (1988) theory because of its robustness and applicability to this study that aim to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Nevertheless, there are scholarly suggestion that comprehensive understanding of the inner and outer context of the organisation under study is imperative. This implies that brief categorisation of context is not sufficient to the understanding of the contextual roles. This is because contextual categorisation does not provide information to the strategic drivers of the organisation on how to deal with contextual differences along with the attendant implications (Dawson 1994; Buchanan and Boddy 1992; Buchanan 1991).

Hence, it can be argued that the Pettigrew theory lack the required interrelationship between the inner context and outer context as also observed by Calwell (2006) and Carter (2000).

These scholars further point out that limited attention is given to the strategic drivers of an organisation, hence creating a gap between the inner context and outer context in this study. However, this study mitigated this observed limitation by employing multiple contexts such as ownership structure, funding, decision making in NNPC, regulatory structure, non-fixed tenor for the GMD, executive directors, top and mid-management recruitment and selection. Similarly, the constructs of exiting JV Cash-calls option, Joint Ventures, and Work-In-Progress Strategies (future strategy) were also comprehensively reviewed at different levels of analysis and the interaction amongst these context constructs.

Similarly, Carter (2000) points out that Pettigrew processual analysis suggest being historical. However, it exhibits a limited understanding of historical details. This study mitigates this limitation by providing comprehensive insight into the oil and gas industry. Carter (2000), Further points out that Pettigrew's theory keenly focuses on the "here and now" of an event with an inadequate theoretical foundation. This study recognises the impact of the time horizon. Time horizon makes the study of change in an organisation complex. Accordingly, these observed limitations in the Pettigrew framework are addressed in this study by focusing between 2014 and 2017, being the peak of the oil and gas downturn. Accordingly, this study focused on critically evaluating actions, response and interactions between the themes and subthemes of the inner and outer context in order to gather comprehensive insight from the analysis with a stated time threshold.

Another observed limitation of the Pettigrew theory lies in its utilisation. Most of the existing application of the Pettigrew theory focus on the Western developed economies as against emerging economies such as Nigeria. This limitation is addressed by employment this Pettigrew theory in the oil and gas industry situated in an emerging economy, such as Nigeria.

The section with explore the growth strategy in the oil and gas industry.

3.5. Growth Strategies and the Oil and Gas Industry

According to Shelton (2005), growth is the avenue for survival, especially in a complex and emerging business environment such as the oil and gas industry. This scholar defines growth as a process of reducing resource deficiencies arising from the liabilities of innovation and smallness. Furthermore, Shelton (2005) points out that the organisation's resource and environmental forces constrain decisions relating to strategy formulation. Thus, owing to pressures induced by the wave of environmental forces in the oil and gas industry, top management is forced to either review or employ new growth strategies. This strategy review is undertaken to strengthen the organisation's core business, broaden its product range, and reorganise its activities (Barreau 2002).

Nevertheless, Keogh et al. (1998), point out that decisions relating to growth strategy are characterised by the organisation's scale of operations, market dynamics, government, geographical structure of the country, age of organisation, stakeholder's interest, legal framework, and receptiveness to risk, product, and customer's structures. Similarly, Agnihotri (2014), provided an additional three characteristics that require consideration regarding the choice of growth strategy in an organisation. Firstly, "corporate reputation," secondly, "relative performance of the industry," and "competitive intensity." "Corporate reputation" refers to the assessment of the organisation by its shareholders, disclosed by customer feedback, the employees, the general public, and the investors (Fombrun 2012).

This scholar further asserts that corporate reputation is a key determinant of competitive advantage to an organisation having met the required criteria of valuable", "rare," imperfectly imitable," and "not substitutable" which a resource should have to guarantee a sustainable competitive advantage of an organisation (Barney 1991). Furthermore, (Fombrun 2012) acknowledged that the "corporate reputation" of an organisation impact an organisation's financial risk and financial reporting quality.

Nevertheless, (Fombrun 2012) points out that the characteristic of "Corporate reputation" is underpinned by financial attributes and the strategic attributes of the organisations which also impact the organisation, "Corporate reputation" especially as communicated by the mass media (Deephouse 2000). Similarly, Agnihotri (2014) observes that "relative performance of the industry" is one of the crucial drivers of choice of growth strategies and, accordingly, impacts an organisation's strategic decisions about growth possibilities. "Relative performance of the industry" of an organisation is concerned with the analysis of the performance of an organisation or industry against appropriate yardsticks such as profitability, sales, stocks in the marketplace, market share, return on investment, the general perception of the organisation by its shareholder, customers, employees, and investors (Agnihotri 2014).

According to Antle and Smith (1986), an organisation's performance compared to its industry competitors shapes the opinion and perception of its shareholders and potential strategic partners. Consequently, acting as a critical resource in decisions of growth strategy. "Competitive intensity" refers to the degree to which organisations within a distinct industry exert pressure on each other's market share and profit potential (Porter 1991). Accordingly, there is an established linkage between "competitive intensity" and Porter's 5 Forces and the SWOT framework in industrial or organisational analysis. Zott (2003) observes that differential organisational performance within the same industry is underpinned by dynamic capabilities and efficient resource utilisation. Agarwal and Samwick (1999) further point out that organisations with poor performance are more aggressive and compete more actively with competitors in the product market. Similarly, evidence of poor historical performance that is below industry standards prevents ambitious performing organisations from seeking growth options with poor performing organisations. Accordingly, relatively poor organisational performance exerts pressure on top management to review or opt for new growth options. Nevertheless, the strategic decisions to either review or develop a new strategy is undermined by poor performance (March 1991).

3.5.1 Types of Growth Strategies

The choice of growth strategy in an organisation is complex and influenced by environmental uncertainty, an organisation's resources, and key stakeholder perceptions (Ensley et al. 2006; Chandler and Hanks 1991). Other forces such as government regulations and market/product life cycle are also listed as factors impacting the choice of organisation's growth strategies (Covin and Slevin 1991). Accordingly, organisations undertake a critical analysis of the environment, review their resource capability before undertaking decisions relating to the choice of a growth strategy to achieve set objectives.

Ansoff (1957) categorised growth strategies into "market penetration", "market development", "product development", and "diversification". "Market penetration" entails an effort to increase firm sales while maintaining the original product-market strategy. Similarly, "market development" is concerned with delivering existing products into new markets. This strategy usually deploys merger and acquisition as a vehicle for targeting a new geographical market (Dyson et al. 2007). "Product development" refers to an organisation's desire to increase sales by developing improved products for its existing markets. Finally, "diversification" is a complete departure from the present product line and the present market structure (Ansoff 1957). This strategy involves targeting a new geographical market.

Similarly, Johnson et al. (2018) assert that an organisation can grow either "organically" or "inorganically" subject to the choice of growth strategies deployed by the top management (Clegg et al. 2017; Grant 2016). Nevertheless, these growth strategies are underpinned by the outcome of critical analysis of the business environment and the organisation's resource base (Kannothra and Haigh 2016; Haigh 2015; Agnihotri 2014).

3.5.2 Organic growth strategies

This is the process whereby an organisation increases in number or size by leveraging upon and utilising their own indigenously developed resources, e.g., technology, organisation structure, human capital, management and leadership skills, financial capability, facilities, amongst others (Johnson et al. 2018; Clegg et al. 2017; Grant 2016; De Wit and Meyer 2014; Ansoff 1957). Johnson et al. (2018) point out the advantages of the process of growing organically to include "knowledge and learning," "spreading the investment over time," "no availability constraints," "strategic independence," and "culture management." "Knowledge and learning" entail employing an organisation's existing resource capabilities to implement new growth strategies. This creates the opportunity for the direct involvement of employees in the organisational knowledge and learning process, consequently promoting the internalisation of enhanced knowledge with the organisation. "Spreading investment over time" focuses on the inherent opportunity of widening the investment over the full cycle of strategy formulation. This contraction of upfront payment concerning the cost of strategy formulation and implementation make review or adjustment of strategy manageable in a dynamic environment such as the oil and gas industry. "No availability constraints" is the time benefit accrued by the top management in the process of organic strategy formulation. Top management does not necessarily have to wait to secure a perfect matched target for either merger and acquisition or even alliance as a growth strategy when deploying an organic growth strategy. "Strategic independence" is concerned with reducing or even eliminating compromise criteria incorporated in alliance or merger and acquisition growth strategy by a prospective partner organisation. Finally, "culture management" is also a crucial element in the choice of growth strategy (organic and inorganic). Culture in the context of this thesis is the collection of norms and values that emerge from the organisation's promoters, leaders, and top management aimed at achieving set objectives in a distinct pattern (Hofstede 1998). Organic growth strategies permit new strategies to be formulated within the existing cultural environment, reducing or even eliminating the risk of cultural disputes in the organisation (Hofstede 1998).

There is scholarly assertion that employing organic growth has the advantage of less risk than inorganic growth (Johnson et al. 2018; Clegg et al. 2017). Similarly, using organic strategy enables the organisation to leverage existing capabilities, and financing from internally generated revenue is likely to enhance growth (Johnson et al. 2018; Clegg et al. 2017; Chen et al. 2009). Nevertheless, these scholars also posit that reliance on organic growth strategy based on internal capabilities is dependent on market factors, e.g., the intensity of competition, technological innovation, internationalisation, diversification, amongst others. Additionally, these scholars point out the inherent difficulty of increasing the market share of an organisation that is already a market leader in an industry.

3.5.3 Inorganic Growth Strategies

The oil and gas industry remains persistently impacted by environmental forces such as competition, merger, acquisitions, strategic alliances, amongst others (Victor et al. 2012; Tordo et al. 2011). Consequently, top management in organisations are forced to review the strategic process to accommodate these pressures that could inhibit the attainment of set objectives (Inkpen and Moffett 2011). Johnson et al. (2018) point out that some organisations deploy organic strategies, thereby competing in the market of their core competence in response to these forces. Accordingly, organisations leverage on their capabilities, while mitigating against investment risk, culture diffusion, and delay in time concerning the decision-making process relates to organic growth strategies. Nevertheless, if an organisation's motive is to expand into international spheres, it will prefer the inorganic growth strategies, e.g., merger and acquisition, alliance or integration strategies (Agnihotri 2014; Rodriguez et al. 2005; Meyer and Nguyen 2005). However, this is dependent on the appropriate merger and acquisition target. Accordingly, implying that an organisation's motives and intentions are also critical factors that influence the choice of growth strategy to be employed (Cao et al. 2012). Inorganic growth strategy is concerned with buying out another organisation to gain access to the desired market and resources (Agnihotri 2014). According to Harzing (2002), inorganic strategy provides an accelerated route for implementation and growth, such as market expansion. However, inorganic growth strategies pose the challenge of cultural integration (Slangen 2006). Furthermore, inorganic strategies are also a constraint in the context of quick decision-making and shared control given that two or more parties are involved based on the joint venture agreement (Slangen 2006; Harzing 2002).

3.5.4 Growth strategies in the Oil and Gas Industry

The decision concerning growth strategies in the oil and gas endowed nation is determined by its political and economic development direction (Ross 1999). Thus, it is important to explore the conditions that are linked to state ownership since "resource curse or development" can be linked to this assertion (Loung and Weinthal 2001). Thomson et al. (2017); Capon (2008); Loung and Weinthal (2001); and Stokke et al. (1990) argue that a leader's consideration for oil and gas industry development is based on alternative revenue sources, resource-based capability, legal framework, and political reflection. This is evident in Nigeria, where these environmental forces influence the strategic process, e.g., formulation, implementation, and evaluation (Akinrele 2016).

Furthermore, the oil and gas industry in emerging economies like Nigeria is constantly transforming from stability to a complex and turbulent business environment (EIA 2016; Chen et al. 2016; Domaski 2015). These transformations are attributable to environmental forces, e.g., government interference, technological innovation, geopolitics, regulatory reform, diverse shareholder interest, population growth, merger and acquisition, the 2014 oil and gas industry downturn, the oil spike of 2008, the first Persian Gulf War in 1990, amongst others (EIA 2016; Chen et al. 2016; Domaski 2015; Inkpen and Moffett 2011; Tordo et al. 2011; Stevens 2008). Consequently, top management in the oil and gas industry are forced to reformulate their growth strategies and redesign their organisations structures in response to the impact of these environmental forces to meet set objectives (EIA 2016; Chen et al. 2016; Domaski 2015; Le and Chang 2015; Hamilton 2011; Grant and Cibin 1996).

According to these scholars, (Chen et al. 2016; Domaski 2015; Inkpen and Moffett 2011; Tordo et al. 2011; Stevens 2008), the two significant change elements resulting from these environmental forces includes firstly increased competition among the industry players (IOCs and NOCs); secondly, increased sensitivity to the price of supply and demand of oil and gas products globally. For instance, demand and supply shifted with the attendant rise of price from \$14 to \$40 per barrel in 1979 and 1980, falling to \$9 in 1986, rising to \$30 following the first Gulf War in the 1990s, then falling to \$18 in 1991 (EIA 2016; Grant and Cibin 1996;

Al-Chalabi 1991). In the same trend, July 2008 witnessed an increase in the crude oil price to $147. Nevertheless, the environmental forces pressured crude oil prices to decline to $32 per barrels in December 2008 (EIA 2016; Chen et al. 2016). Nevertheless, this period also occasioned economic recovery that improved crude oil price to between $100 and $124 per barrel in 2014. However, the crude oil price declined to between $59 and $62 in December 2014 (EIA 2016; Grant and Cibin 1996).

In response to these series of environmental forces impacting on the oil and gas industry, top management reconfigured their growth strategies from "vertical integration to outsourcing," from "corporate planning to intrapreneurship," from "diversification to focus strategy," from "horizontal integration to divestment," and finally, from “enlarging staff strength to staff reduction” (EIA 2016; Mitchell and Mitchell 2014; Shuen et al. 2014; Victor et al. 2012; Inkpen and Moffett 2011; Tordo et al. 2011; Grant and Cibin 1996).

According to Clegg et al. (2018), vertical integration is typified by an organisation that engages in the different parts of the production of the entire value chain of business operations. Dyson et al. (2007) note that a vertically integrated company owns and controls the entire value chain (Upstream, downstream, and midstream activities). This is because vertical integration is a critical driver of profitability in an organisation, as observed by Schoeffler et al. (1974). The IOCs and NOCs apply vertical integration to effectively drive the upstream and downstream segments to achieve considerable profit (Dyson et al. 2007). However, this advantage is challenged at the downstream segment of the value chain. Hence this requires a review of this growth strategy by top management in an organisation, especially in the NNPC with identified strategic issues (Akinola 2018; Akinrele 2016, Nwokeji 2007).

Vertical integration is categorised into "backward or forward," "diversification intra country," and or "cross-border or multinational" (Clegg et al. 2018; Misund and Osmundsen 2015; Tordo et al. 2011; Siebert and Rauscher 1985). Backward integration entails an organisation acquiring segments of its supply chain aimed at value creation. In contrast, "forward integration" is a growth strategy whereby an organisation expands its business activities to capture direct control of the distribution network for its products (Clegg et al. 2018). Conversely, "diversification intra country" involves enlarging the range of products or field of business operations aimed at reducing exposure to risk in a dynamic business environment (Clegg et al. 2018; Misund and Osmundsen 2015; Tordo et al. 2011). Finally, "cross-border or multinational" refers to international trade, e.g., business activities across a border between two or more countries (Clegg et al. 2018; Misund and Osmundsen 2015; Tordo et al. 2011).

The shift from a vertical integration growth strategy to outsourcing strategies is informed by the cost-reduction benefits of outsourcing strategy, as Globerman (2017) observed. Outsourcing is the practice of either selling or contracting an organisation's assets (e.g. exploration and production, transportation, refining activities) to a third party for monetary payment over an agreed period (Levy 2004; Kern et al. 2002). Outsourcing strategy proliferated in the 1990s and has now become an accepted dimension of corporate strategy due to the cost-saving benefits, a potential source of competitiveness and improved value creation for shareholders (Globerman 2017; Hayes et al. 2000). Globerman (2017) points out some of the value creation inherent in outsourcing to include: firstly, lower the purchase price of some critical inputs (human asset, technology) by exploring the benefits of the external supplier's lower costs; secondly, quality improvement of one or more of the inputs by purchasing some capability from the suppliers. Nevertheless, the supplier's advantage will not be easily imitable (Globerman 2017).

Furthermore, top management in the oil and gas industry has also responded to environmental forces' impact through "corporate planning." According to Johnson (2016), corporate planning equips business owner with detailed direction for enhancing business operations and promoting the organisation's mission. Corporate planning points out clearly the "goal," "desired outcome," "strategies," "measure and target," and "results" while focusing on the organisation's “mission statement” (Johnson et al. 2018; Clegg et al. 2017; Thomson et al. 2017; Grant 2016). According to these scholars, "goal" is concerned with what needs to improve in the organisation. "Desired outcome" focuses on where the organisation wants to go. "Strategy" is the long-term planning direction of the organisation with an emphasis on who, what and when. "Measure and target" are concerned with monitoring and evaluation to determine success or difference. Finally, the "results" are centred on the outcome with key consideration of the "mission statement."

"Mission statement" is a short statement for providing reasons for the establishment of an organisation, philosophies or values, goals, products and services, market, amongst others (Johnson et al. 2018; Clegg et al. 2017; Thomson et al. 2017; Grant 2016).

Corporate planning growth strategy is akin to the planned approach to strategic management as developed by the work of Lewin (1951) that focuses on pre-planned change. This strategy ignores specific, incremental or even accidental action in the dynamic and unpredictable oil and gas environment in which that organisation operates (Kanter et al. 1992). Corporate planning seems also limited to good ideas, and opportunities that emanate from the bottom of an organisation, often from the practical experience of the employees (Johnson et al. 2018; Clegg et al. 2017). Accordingly, it necessitated oil and gas companies to advance into intrapreneurship strategies that consent to adaptation and learning through regular interaction between strategy formulation and implementation (Grant 1995). The term intrapreneurship in this thesis refers to a system that encourages employees to act as entrepreneurs within the organisation (Augusto et al. 2012; De Villiers 2007; Grant 1995). These scholars point out that intrapreneurs demonstrate proactiveness, motivation, and action-driven employees who employ the initiative to modify and review products or services in anticipation of environmental forces impacting the oil and gas industry.

Nevertheless, the persistent impact of environmental forces further pressured top management in the oil and gas industry to introduce a "diversification strategy."

Diversification is a complete departure from the existing business into an entirely new or related industry (Ansoff 1957). This strategy aims to achieve growth and maximum utilisation of an organisation's resources and capabilities. Nevertheless, the oil and gas industry has witnessed a departure from diversification to "focus strategy." According to Tordo (2011), the oil and gas industry employs a focus strategy to target the existing market to reduce competitive pressures, compete with limited resources and capabilities, and, finally, avoid distraction from the existing strategy. However, the persistent turbulence in the oil and gas business environment remains a critical concern despite the arrays of employed growth strategies (Globerman 2017; Misund and Osmundsen 2015; Tordo et al. 2011).

Accordingly, organisations in the oil and gas industry also employ other strategies such as horizontal growth strategy to achieve set objectives (Tordo et al. 2011). According to Grant (2016), horizontal integration involves acquiring a similar company in the same industry by another company. Clegg et al. (2017), point out that organisations, through their corporate strategy, achieve major extension in size, comprehensiveness of activities, and sometimes, profitability by employing "mergers and acquisitions," "alliances" as growth strategies (Clegg et al. 2017; Grant 2016). According to Thomson et al. (2017), mergers are the amalgamation of two or more companies to form a new company. This is undertaken with the consent of the shareholders and exchange their shares for the shares in the new company, while acquisitions entail the purchase of one company by another (Grant 2016). Similarly, "alliances" entail collaborative arrangements between two or more firms to pursue certain common goals (Thomson et al. 2017; Grant 2016).

According to Dorata (2012), the success or failure of mergers and acquisitions growth strategies is dependent on the strength and weaknesses of the organisations involved, the regulatory framework, government, and significantly, the stakeholders. This is because acquiring an organisation's stakeholders are mostly interested in post-acquisition return on their stakes. Similarly, while the employees have concerns about the risk of job loss during a merger and acquisition, the consumers focus on the resultant synergies that this strategy avails, e.g., pricing of products and services, discounts, subsidies, amongst others (Harp et al. 2017; Dorata (2012). Nevertheless, Harp et al. (2017), identified some challenges in deploying mergers, acquisitions, and alliances as growth strategies. These scholars point out the difference in organisational culture (culture clash), lack of transparency, ineffective communication, job loss, evaluation and assessment error, and legal and government constraints. Accordingly, necessitating a further review of growth strategy in the industry, such as "divestment growth strategy."

According to Ritchie and Dowlatabadi (2014), divestment growth strategy in the oil and gas industry is focused on disposing of an asset through either exchange, absolute sale, or even closure by an organisation. Furthermore, Ritchie and Dowlatabadi (2014) opine that a divestment strategy is a key option for value creation in an organisation in the process of an alliance, merger acquisition, and unification process. Justification concerning the divestment strategy in the oil and gas industry includes the need to eliminate or liquidate the non-core line of business operations that affect the attainment of commercial and non-commercial objectives (Hunt and Weber 2019; Durand and Verge 2015). Similarly, organisations divest to dispose of subsidiaries or sub-units that are under-performing, consequently impacting on regulatory requirements and set objectives (Hunt and Weber 2019; Durand and Verge 2015; Ritchie and Dowlatabadi 2014). For instance, Hunt and Weber (2019) point out the environmental and financial consequences of carbon-related emissions from downstream, midstream and upstream of the oil and gas industry on stakeholders, and most importantly, global warming.

Similarly, EIA (2016) observe that the activities of the oil and gas companies have direct consequences on regional stability and climate change. For instance, air, land, and water pollution that lead to loss of arable land and decrease in life and fish stock which is the mainstay of the inhabitants of the Niger-Delta (EIA 2016; Oyewunmi and Olujobi 2016; Nwokeji 2007). Divestment strategy creates the advantage of strategic focus, transparency, and value creation. Nevertheless, it also creates a negative impact on the organisation's cost structure and employees (Hunt and Weber 2019; Durand and Verge 2015; Ritchie and Dowlatabadi 2014). This is because the cost of operation and workload are usually shared between two or more sub-units in an oil and gas organisation (Hunt and Weber 2019). Consequently, the elimination of a cost centre inevitably exerts pressure on the remaining subunits of the organisation.

Furthermore, divestment strategy impacts the contractual agreement between stakeholders and the organisation, e.g., partners, employees, vendors, host communities, and government (Hunt and Weber 2019; Durand and Verge 2015; Ritchie and Dowlatabadi 2014). These observed limitations of divestment strategy led to further review of growth strategies in the oil and gas industry, especially in the 2000s that were identified by crude oil supply volatility (Ritchie and Dowlatabadi 2014). Similarly, top management also needed to respond to the transition to renewable energy from fossil fuel sources informed by global climate reforms. Accordingly, confronted with these uncertainties, top management developed a resilient strategy that focuses on staff reduction from the enlarged staff strength" (EIA 2016; Mitchell and Mitchell 2014). This strategy aims to curtail cost in the oil and gas industry (Shuen et al. 2014; Victor et al. 2012; Thomas

2008). According to Inkpen and Moffett (2011), staff reduction strategies in the oil and gas industry focus on reducing the employee strength by cutting down new oil field and other exploration and production projects considered riskier (EIA 2016; Inkpen and Moffett 2011; Tordo 2011). Similarly, the staff reduction strategy emphasises improving matured oil fields with substantial investment outlay. However, this strategy creates a strategic deployment challenge in ventures and projects with high economic returns requiring specialised skills (Feiler and Teece 2014).

In retrospect, the national oil companies (NOCs) employ these growth strategies, e.g., "vertical integration, outsourcing, corporate planning, diversification, horizontal integration, divestment amongst other (EIA 2016; Victor et al. 2012; Inkpen and Moffett 2011; Tordo et al. 2011). Nevertheless, Loung and Weinthal (2001), broadly categorised national oil company’s growth strategies into nationalisation and privatisation.

Nationalisation refers to a situation whereby an oil and gas producer nation takes ownership of its upstream, midstream, and downstream activities to maximise revenue from crude oil production while adjusting the existing legal framework (Stevens 2008; Loung and Weinthal 2001). Justifications for nationalisation include: limiting IOCs operations, asserting total ownership, the IOCs take large profit margin, market failure and Little benefit to the host communities (Stevens 2008). An example is the Nigerian Niger Delta oil disruption scenario (NNPC 2016).

Loung and Weinthal (2001) further categorise nationalisation into “retained state ownership with indirect international involvement” and “retained state ownership with direct international involvement." Retained state ownership with indirect international involvement entails maintaining full state ownership of the national crude reserve without any form of international involvement (Loung and Weinthal 2001). Conversely, in “retained state ownership with direct international involvement," the ownership structure is partly diluted with foreign investment and participation (Victor et al. 2012; Inkpen and Moffett 2011; Tordo et al. 2011; Loung and Weinthal 2001).

Furthermore, NOCs have also deployed privatisation as a growth strategy in the oil and gas industry. According to David and Ossowski (2003), privatisation entails the transfer of NOC in its entirety to the private sector through sale to an investor, public, or combination of the two. Loung and Weinthal (2001) further categorise privatisation into indirect international involvement and direct international involvement.

In retrospect, the inability of the NNPC to meets it profitability and growth in market share objectives led the Federal Government of Nigeria (FGN) to privatise the downstream sector of petroleum in 2000 by selling off its majority interest in the petroleum retailing companies like Unipetrol, National Oil and African Petroleum to core investors (Akinrele 2016; BPE 1999). This process was implemented through the Nigerian Bureau of Public Enterprises (BPE 1999), although the FGN retained limited involvement through the NNPC retail unit (NNPC 2016). However, the full privatisation process was suspended in 2006 for inexplicable justifications by the FGN and subsequent attempts to conclude the process have not been successful. Thus, FGN still retain ownership of the refineries and distribution systems (Akinrele 2016).

In summary, top management employs an array of growth strategies such as organic and inorganic strategies to achieve stated organisation objectives. Nevertheless, the success of these strategies is a function of the effective strategy implementation process (Clegg et al. 2017; Grant 2016; Hussey 1997). According to Okumus (2001), knowledge of strategy implementation is an essential component of strategic management. Similarly, Alexander (1999) asserts that there is a need for a detailed and comprehensive implementation framework for an organisation to succeed in a dynamic business environment (Noble 1999).

3.6 Chapter conclusion

This chapter is informed by the environmental forces that impact an organisation's growth strategies identified in chapter two. Accordingly, this chapter focused on analysis of the contemporary strategic management field that shape the strategic direction of an organisation, particularly NNPC. This extended literature review chapter comprehensively examined and identified the key debates in strategic management, strategic management in the public sector, strategy frameworks and tools, strategy implementation, change management models in response to the impact of these environmental forces in the oil and gas industry, specifically, NNPC Nigeria.

Extracts from the literature reveal significant differences in various approaches to strategy, change management, and how organisations respond to environmental forces that impact their growth strategies. The chapter further attempts to identify the theoretical gaps inherent in each of the various strategy and change management models.

The chapter progressed by selecting CCP Pettigrew (1988) three lens theory based on the alignment of this theory with the research aim, objectives, and research questions. An examination of the CCP Pettigrew (1988) three lens theory was conducted to gain in-depth insight into the relevance of the current growth strategies adopted by the NNPC to achieve growth and profitability. Furthermore, the Pettigrew theory's observed limitations were discussed to provide a comprehensive perspective of the proposed framework for this research study. Nevertheless, the Pettigrew (1988) theory was adjudged suitable because of its robustness and suitability for this study. Accordingly, the constructs of this proposed framework will be compared to identified themes and sub-themes from the data analysis in subsequent chapters.

The next chapter will provide justification for the adoption of CCP Pettigrew (1988) three lens theory was conducted to gain in-depth insight into the relevance of the current growth strategies adopted by the NNPC to achieve growth and profitability.

CHAPTER FOUR

Rationale for the use of Pettigrew (1988) three lens theory Study

4.0 Introduction

Chapter three concluded by identifying some concepts and theories in strategic change management and how organisations respond to environmental forces that impact their growth strategies from the lens of some concepts and theories.

The chapter provides precise and concise insights into some traditional concepts and theories in strategic and change management. Significant amongst these discussed theories is the Pettigrew (1988) three lens theory which appears to aligns with the aim of this study, which is to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Accordingly, the next section (section 4.1) provides key justification for the adoption of Pettigrew (1988) three lens theory in the study that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. The intention is to understand the organisation's poor performance and low profitability to improve the adoption of sustainable growth strategies that will lead to organisational growth and profitability.

4.1 Key justification for the adoption of the CCP Pettigrew (1988) theory

Several scholars acknowledge the robustness of this CCP Pettigrew (1988) three lens theory in investigating an organisation's growth strategy in response to environmental forces (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Grant 2016; Pettigrew 1992). Accordingly, the CCP Pettigrew (1988) three lens theory will be deployed to explore the appropriateness of the current growth strategies adopted by the NNPC in response to environmental forces.

This research aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. The CCP Pettigrew (1988) three lens theory aligns and captures all the dimensions of this study, that is, the context (the internal and external environment, being the WHERE), the context (the objective, purpose, and goal, being the WHAT), and finally, the Process (implementation, being the HOW). The CCP Pettigrew (1988) three lens theory emphasis the continuous interplay between these change dimensions. Similarly, the implementation of change is an iterative, cumulative, and reformulation-in-use process (Pettigrew and Whipp (1991). This points out that successful change is the outcome of the interaction between the content or the "what" of change (objectives, purpose, and goals); the process or the "how" of change (implementation); and the organisational context of "where" of change (the internal and external environment).

Based on empirical research, the CCP Pettigrew (1988) three lens theory addresses five central interrelated factors belonging to successfully managing strategic change in an organisation (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Thomson et al. 2017; Grant 2016; Stockdale and Standing 2006, Pettigrew 1992; Pettigrew and Whipp 1991). These interrelated factors are environmental assessment, human resources as assets and liabilities, linking strategic and operational change, leading change, and finally, overall coherence (a change strategy should be consistent (clear goals), consonant (with its environment), provide competitive edge and be feasible. These five identified factors relate to the the research aim (section 1.3), thus, justifying the adoption of the CCP Pettigrew (1988) three lens theory in this study.

Regardless of of the identified weaknesses of Pettigrew (1988) theory (section 3.4.5), Stockdale and Standing (2006) argue that as systems (information, organisation systems) have become more complex, so has the evaluation process, which permits original contribution in organisations. Organisational evaluation now takes into consideration the adoption of a broader view to accommodate e-commerce and networking, connecting organisations and customers (Bigdeli et al. 2017), as well as the transition of systems from competitive advantage to competitive necessity (Stockdale and Standing 2006 PP. 1090). Guba and Lincoln (1989) argue that organisational evaluation is no longer a technical problem but better treated as an all-encompassing socio-technical and political problem. Evaluating one aspect of the three aforementioned problems will lead to an insignificant conclusion of the problem. Hence, the Context, Content and Process (CCP) in the Pettigrew (1988) theory presents a detailed framework for examining a range of dynamic dilemmas within an organisation. In addition, Stockdale and Standing (2006) assert that the Pettigrew (1985) framework is suitable for evaluation because of its reception in information systems and the broad concepts which can accommodate multiple ideas and arguments. This study in relation to the above argument requires a framework that will accommodate multiple myriad concepts existing in the organisation and accommodate emerging concepts peculiar to emerging economies as a result of the volatile and dynamic nature of the industry in which the NNPC operates. The three-lens theory is particularly relevant in this study as strategic issues demand consideration of business models and organisational transformation in response to change triggered by environmental forces (Bigdeli et al. 2015).

According to Kindstrom (2010) and as echoed by Bigdeli et al. (2017), business model innovation plays a critical role in the process of organisational transformation given that successful organisational change is underpinned by the consistency between an organisation’s strategy and all the structural elements which are flexible. Nevertheless, there are scholarly claims that a holistic approach is inadequate as strategy encompasses different levels of the organisation content and emergent forces in the organisational environmental context (Turunen and Finne 2014; Kastalli et al. 2013). However, Stockdale and Standing (2006) argue that the contribution to the CCP framework provides a more detailed process of addressing "what" is being evaluated, and "why" the evaluation is being done as well as stakeholders "who" influence the process, and "how" it is carried out'. Accordingly, producing a holistic evaluation process. Given all these processes, content, and context constructs associated with growth strategy, a comprehensive framework is necessary to understand better these strategic issues common to all organisation change efforts, particularly the NNPC, Nigeria.

In summary, the Pettigrew (1988) three lens theory is comprehensive enough to entertain many ideas and discourse about strategy as scholarly observed (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Thomson et al. 2017; Grant 2016; Pettigrew 1992). Accordingly, implying that this theory recognises that the organisation transformation process entails not only the selected strategy, or the process which explain and acknowledge various content options but, also the contexts in which it occurs (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Thomson et al. 2017; Grant 2016; Pettigrew 1992).

CHAPTER FIVE

Research Methodology and Methods

5.0 Introduction

Based on the integration of the findings in chapters two and three, that is, the overview of the impact of environmental forces and critical examination of the strategic management literature in response to these forces, the study presents the research methodology for the study.

Chapter five critically examined the researcher's principles, procedures, and ethos to prefer justifiable and acceptable outcomes to the identified research question. Accordingly, the chapter introduced the philosophical paradigms underpinning this research study and how it relates to the research method adopted. Details of the research methodology and the choice of techniques deployed by the study are explained. Chapter five aims to frame on the brief introduction presented in chapter one (section 1.6). The chapter also recognises the appropriateness of interpretative, inductive approach in data collection. The study employed Computer-Aided Qualitative Data Analysis System (CAQDAS) via NVivo 11 in its data analysis.

Consequently, the study applied a qualitative method in answering research questions, as captured in section 1.3 in chapter one. This chapter progresses by discussing the case study strategy, sample size, and the justifications for their adoption. This chapter explains the exploratory and pilot study earlier conducted before the fieldwork. Ethical consideration also is stated in this chapter. Finally, chapter four discusses the issues of validity, reliability, and credibility of the data collection method applied in the study.

5.1 Research philosophy

Research refers to the systematic investigation that entails data gathering, analysis, and interpretation of a particular event or scenario (Creswell and Poth 2018; Bryman 2016). The research aims to identify, comprehend, and forecast changes geared towards the illumination or resolution of a problem (Creswell and

Poth 2018; Bryman 2016). According to Bryman (2016), research has the attributes of fact-finding exercise. Therefore, researchers endorse diverse paradigms, e.g., patterns, concepts, theories, methods, and standards to acquire knowledge of what constitutes a legitimate contribution to a field of study. Outlining the methodological philosophy of this study that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. The philosophical stance is embedded in the theoretical, analytical, rational, and logical study of knowledge to resolve problem or clarification (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Green 2014). Easterby-Smith et al. (2015), foremost observe four critical justifications for understanding philosophical paradigms in a research study. Firstly, it assists the researcher in understanding key epistemological issues, highlighting the researcher's reflective role in the research study. Thus, attention is given to the pattern of data collection and interpretation. Secondly, it creates clarity of research design, which is critical to making a novel contribution to the chosen field of study. Accordingly, a thorough understanding of applied philosophy enables clarification of the research design of the study.

The clarification presents an appropriate answer to the research problem under investigation. Thirdly, knowledge of the philosophical stance structures the research design to accommodate unforeseen circumstances in the field of study. Finally, understanding philosophical paradigms equips the researcher to distinguish and develop models outside of the prior research experience. Hence, this permit adaptation and synthesis of the research design to the restraints of diverse subjects and knowledge structures. Accordingly, there is a continued heated debate on these various philosophical paradigms when researching the field of social sciences. Therefore, to understand the philosophical paradigms underpinning this study, it is necessary to realise how each philosophical stance emerge. Consequently, creating awareness of the appreciation for the researcher's assumptions which differentiate philosophical research paradigms.

There are efforts to resolve the philosophical paradigms debates. Accordingly, scholars identified ontological and epistemological philosophical assumptions in research study (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016; Easterby-Smith et al. 2015; Silverman 2013). Researchers in the field of social science deploy different research methods and assumptions such as qualitative or quantitative methods (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016). According to Saunders et al. (2016), the decision underpinning research approach and paradigms are majorly dependent on ontological and epistemological assumptions about the research study.

5.1.1 Ontology

Ontology is concerned with questions about the nature of entities under investigation (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Easterby-Smith et al. 2015). Similarly, Saunders et al. (2016), Silverman (2013); Ritchie and Lewis (2003), all agree that ontology is a "study of being" or "what is," and "the nature of existence, with the structure of reality as such" or "what is there that can be known?". Ontology emphasises the nature of the social world and the method by which it would be cross-examined. These scholars point out the criticality of these positions to the process of the judgment of the researchers. These scholars all agree that the central argument of ontological questions lies in the question of whether social entities are objective entities that have reality or social constructions created from the judgment and actions of social actors (Bryman 2016; Campbell et at. 2016; Easterby-Smith et al. 2015; Silverman 2013). These stances are referred to as objectivism and constructivism and are focal terms in social science (Creswell and Poth 2018; Bryman 2016). Their differences illustrate the context of research studies in organisations and culture.

5.1.2 Objectivism

Objectivism refers to an ontological philosophical assumption that states that the social world recognises that reality exists (Saunders et al. 2016). These scholars point out that this reality is beyond our reach and influence (Bryman 2016; Campbell et al. 2016; Saunders et al. 2016; Easterby-Smith et al. 2015; Silverman 2013). Objectivism posits that organisations are tangible objects with a mission statement, procedures, rules, and regulations designed to achieve set objectives by appointed people. As a result, organisations have a reality that is external to their inhabitants (Bryman 2016). This philosophical stance infers that truth could only be ascertained because all knowledge about reality is knowledgeable. Consequently, this suggests that the aim of this study (section 1.4) can be examined independently, that is, without the input (knowledge, experience, beliefs, and opinions) of the research participants. This objectivist philosophical assumption is contrary to the views of the researcher concerning the study aim (section 1.4), thus, not suitable for this kind of study.

5.1.3 Constructivism

Constructivism refers to an alternative ontological assumption (Saunders et al. 2016). Constructivism differs from the objectivism position. This is because constructivism challenged the suggestion of categorisation, e.g., organisation and culture as pre-designed (Bryman 2016). Accordingly, constructivism opposes social actors as external realities that do not influence the social world (Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015).

Constructivism’s philosophical assumption suggests that social phenomena, along with their interpretations, are consistently being accomplished by the act of social interaction and adaptation by social actors (Bryman 2016; Saunders et al. 2016). Thus, implying that people seek to understand their environment and accordingly, attribute meanings based on their individual experience, beliefs, and opinions. Constructivism scholars posit that this assumption generates multiple views of constructed realities and is consequently align with qualitative research approach (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016 Easterby-Smith et al. 2015; Morgan 2014; Silverman 2013). The tenet of constructivism is insightful and appears to align with this research study in understanding the strategic process of the NNPC and how top management and employees respond to the impact of environmental forces in the petroleum industry.

5.1.4 Epistemological Stance

Epistemology is a discipline that relates to the theory of what is known and the unknown (Bryman 2016; Saunders et al. 2016). According to Easterby-Smith et al. (2015), epistemology focuses on the stance of what should constitute acceptable and valid knowledge about a particular field of study, and how this knowledge can be communicated. The epistemological position enables the researcher to understand the appropriate process of enquiring about the nature of the social world (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015). Consequently, epistemological assumptions relate to how knowledge about the study can be collected, the theory and the justification of the knowledge aimed at validation between the dichotomy of "true" or "false".

There are numerous philosophical positions associated with ontological and epistemological philosophical assumptions in research study (Creswell and Poth 2018. For example, axiology, objectivism, constructivism, positivism, and interpretivism (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015).

The following section will highlight these assumptions individually. This is to assist the researcher in determining the premise that directly affects the methodological nature of this field of study (Hartley 2010; Burrell and Morgan 2005).

5.1.5 Methodological Assumptions

The methodological assumptions focus on the researcher's rationale for tools selected to investigate assumptions, e.g., the ontological and epistemological stance (Bryman 2016; Biddle and Schafft 2015). According to Creswell and Poth (2018), the methodological philosophical stance consists of the assumptions designed by the researcher in respect of the methods in the process of conducting qualitative research. Therefore, the procedures deployed for data collection and analysis are highly inductive driven and align with the researcher's own research experience (Bryman 2016).

5.1.6 Axiology

The axiology philosophical stance is concerned with the role of value and ethics in the cause of the research process (Bryman 2016; Saunders et al. 2016). Accordingly, axiology captures how the researcher manages their values and ethics and that of the research participants in a particular research study. Axiology depends crucially on the nature of ethics, the notions of worth and what is of value in the field of study (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Biddle and Schafft 2015). According to Biddle and Schafft (2015), regardless of the preferred researcher's method of inquiry, axiology plays a critical role in selecting and formulating the research questions and stirring the researcher's interest over other areas. This is because of the intersection of the existing norms of a particular research community and the researcher's commitment. These create axiological issues that can only be resolved by engaging other physiological assumptions (Mertens et al. 2010; Mertens 2007).

Consequently, it is important that the researchers draw from other philosophical assumptions when deciding to choose research methodology, such as ontological, epistemological, objectivism, constructivism, positivism, and interpretivism (Joseph and Gupta 2021; Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016). The positivist and interpretivist philosophical assumptions or phenomenology stand out in this research study. This is because the research study aims to focus on a critical examination of the individual's subjective experience that set the strategic direction for the NNPC. The principal consideration is on how the research respondent creates, reviews, and interprets the world. Thus, in methodological terms, the emphasis will be placed on the explanation and understanding of the selected individual rather than the generality (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016).

5.1.7 Positivism Stance

Positivism refers to the study of the social world from a natural scientist context (Creswell and Poth 2018). The positivist philosophy is the stance of the natural scientist and recognises only that which can be scientifically verified. Accordingly, the research strategy for data collection hinges on existing theory to develop a set of research hypotheses (Bryman 2016; Saunders et al. 2016). Positivist philosophy is a deductive approach driven, nevertheless, with elements of the inductive method as argued by Creswell and Poth (2018). The cardinal concept of positivist assumptions contends that certain knowledge is attributable to natural phenomena in the social world that exist externally, and their properties and relations should be measured objectively rather than through reflection (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015).

The positivist philosophical assumptions argue that the truth can only be known through objective, independent and measurable reality (Easterby-Smith et al. 2015).

The post-positivists have consistently challenged the core tenet of the positivist philosophy concerning the absolute truth of knowledge as observed. Creswell and Poth (2018); Bryman (2016); Saunders et al. (2016) argue that absolute truth of knowledge is not applicable and appropriate to research study involving human behaviour and action, rather a deterministic approach to understanding cause and effect (Creswell and Poth 2018). Consequently, research study driven by the positivistic philosophical assumptions will only apply to numerical methods, where the constructs of observation and measurement are suitable. Therefore, the core constructs of the positivist philosophy make it entirely inapplicable to this research study which is qualitative driven.

This study aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. Therefore, the research study tries to gain insight into the underlying reasons, opinions, and experiences of the top management and employees of NNPC who set the strategic direction in response to environmental forces.

The interpretivist stance arose from the criticism of the positivist philosophical paradigms.

5.1.8 Interpretivist Stance

The interpretivist stance points out that to understand actions, organisations practices and institutional structures, the researcher needs to comprehend the ideology, beliefs, preferences and meanings of people or social actors (Bevir and Rhodes 2002). Interpretivist is a philosophical position that suggests that social scientists embrace the subjective meaning of social action (Bryman 2016; Saunders et al. 2016). The interpretivist stance argues that the knowledge of what constitutes reality and understanding of social construction by human actors is crucial in social science research (Bryman 2016; Saunders et al. 2016; Schwandt 2001). Interpretivist researchers are critical of the use of the scientific model in the study and understanding of the social world. These scholars suggest applying a different logic of research procedure that resonates the uniqueness of humans over natural science underpinned by different intellectual traditions (Bryman 2016; Saunders et al. 2016).

Interpretivism points out that the application of different logic by the researcher is likely to uncover unforeseen findings or at least what appears to be surprising outside the particular context under investigation (Bryman 2016). Interpretivist researchers aim to provide explanations of the social world, and their beliefs and motives often underpin this. This stance aligns with the views of Blumberg et al. (2014), who assert that the researcher's interpretation is socially constructed. Orlikowski and Baroudi (1991) argued that the interpretivist philosophical stance is underpinned by the assumption that people design, and attribute subjective and intersubjective meanings based on interaction with the world where they exist.

Considering the constructs of the subjective meaning of social action of the interpretivist is philosophical assumptions, the emphasis is more qualitative over quantitative research (Bryman 2016; Saunders et al. 2016). Based on the construct that reality is socially constructed, this research study endorses the interpretivist philosophical view to elicit and understand how top management and employees in NNPC make sense of their world. The interpretivist philosophical stance of this research study captures the meaning of senior management and other employees' experience and opinions regarding the NNPC growth strategy in response to the impact of environmental forces in the oil and gas industry.

According to Idowu (2011), interpretivist philosophical assumptions deal with how people understand their experiences and aim to explore meaning based on the investigation of research problems that are complicated for practical or ethical reasons. Nevertheless, qualitative study underpinned by the interpretivist stance is criticised for being too descriptive in contrast to quantitative research, which is driven by the positivist assumptions that emphasises on procedure and statistical measures of validity (Bryman 2016; Saunders et al. 2016; Idowu 2016; Gummerson 2000). However, the assumed merit of interpretivist philosophical assumptions to explore, identify structure through patterns exhibited by human behaviour aligns with this research study informed by NNPC's top management and other employees' action and inaction (Saunders et al. 2016; Schein 2011; Alvesson 2011). Therefore, interpretivist paradigms permit detailed, meaningful, and critical analysis of underlying beliefs, values and assumptions in the study of an organisation's phenomena. Accordingly, a sufficient account of the strategic issues, growth strategies, and the response mechanism deployed by NNPC's top management and other employees can be identified. Consequently, this research study suggests the qualitative approach through interpretivist philosophical assumptions which score highly on depth, realism, adaptiveness, flexibility, and heurism (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Idowu 2016; Rubin and Rubin 2005; Denzin and Lincoln 2011; Idowu 2011).

Interpretivist philosophers recognise the research participants under investigation who are selected from the purposeful sample can be misrepresented due to the researcher's worldview. Interview transcripts, diaries and company documents are the key raw data sources for this research study to mitigate this observed weakness (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016).

5.2 The study Research philosophical paradigms

Philosophy refers to the use of abstract perception, ideas or beliefs that underpin a research study (Creswell and Poth 2018). The philosophical stance in any research is important as it enables the research to meet its intended purpose by achieving its aims and objectives (O'Reilly and Kiyimba 2015; Saunders et al., 2012; Soini and Kronqvist, 2011). Huff (2009) aligns with these scholar's assertion by pointing out the advantages of philosophy in a research study to include "direction of the research goals and outcome", "scope of training and research experiences", and finally, "basis of evaluative criteria for research-related decisions". Firstly, "direction of the research goals and outcome" is concerned with how we design our research problem and research questions underpinned by our assumptions, which accordingly influence the pattern on how to elicit information to answer the research problems. Creswell and Poth (2018) define this relationship between our research problem and assumptions as a "cause and effect" type of research questions. These scholars observe that it allows the prediction of variables to explain an outcome contrary to an explanation about a single phenomenon akin to this kind of qualitative research study (Creswell and Poth 2018). The "scope of training and research experiences" is deeply enshrined in our exposure to learning and strengthened by our engagement with the scholarly community, therefore, enhancing our research knowledge and understanding of the research study.

A research study is underpinned by the knowledge of the various philosophical assumptions, distinctive attributes, and importance of philosophical assumptions.

The epistemological interpretivist philosophy which explores a phenomenon by understanding the reason for action, inaction, and the interaction between time and context is suitable for the study (Creswell and Poth 2018). The epistemological interpretivist premise is that people’s actions and inactions are based on their ideology, beliefs and preferences (Bevir and Rhodes 2002). Accordingly, it is possible to attribute and explain their action and inaction by referring to that. Another premise of epistemological interpretivist philosophy is that we cannot separate people's ideology, opinions and preferences from the objective facts about them, e.g., race, social class or institutional status. Interpretivism opine that a relationship exists between the researcher and that which is being researched and every outcome is a product of the interaction between time and context (Creswell and Poth 2017; Pickard 2007; Silverman 2013). Creswell and Poth (2018) also agree that research can be conducted from the interpretivist epistemological viewpoint, using qualitative methods.

5.2.1 Research Approach

Social science research recognises inductive, deductive and abductive research approaches (Tavory and Timmermans 2019; Creswell and Poth 2018; Awuzie and McDermott 2017; Saunders et al. 2016). These approaches are mainly concerned with questions of the design of a chosen research study. According to Saunders et al. (2016), the research approach educates the researcher of the research strategy and in the preferred choice required for a particular research study.

The inductive approach entails the collection of research data and the development of theory as a result of the analysis of data collected (Creswell and Poth 2018; Saunders et al. 2016). This implies that there is no existing theoretical basis before data collection. Instead, inferences are drawn based on the data collected by the researcher. This aligns with the scholarly assertions that the inductive approach is a shift from the empirical observation of the real world to designing theories of what has been observed (Creswell and Poth 2018; Awuzie and McDermott 2017; Saunders et al. 2016; Bryman 2016). In addition, these scholars point out that the inductive approach is qualitative driven and suitable for small sample studies that focus on understanding the research context and understanding the meaning of the research participants. This is contrary to the deductive approach that is quantitative and driven by scientific principles which progress from existing theory to data collection (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016).

According to Bryman (2016), the deductive approach refers to the relationship between theory and research in which research is underpinned by existing theory, rather than ideas inferred from the research. This implies that the deductive approach entails the development of a theory-testing process aimed at the examination of a theory and its application to a particular phenomenon. The deductive approach develops when specific results emerge logically from a set of premises. Hence, the emerging result precedes the earlier assumption. Key features of the deductive approach include the application of scientific control measures to ensure validity, the researchers' dependence on what is being researched, selection of large sample size aimed at a generalised research conclusion, and finally, an explanation of the causal relationship between variables and quantitative data collected (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016). As observed by Saunders et al. (2016), the casual relationship between variables and data aligns with the positivist assertion of Joseph and Gupta (2021). Joseph and Gupta (2021) posit that the deduction approach leans towards positivist assumptions, having established cause and effect linkage between specific variables.

Saunders et al. (2016) point out that the deductive approach cannot comprehensively understand how the human world is interpreted in a research study. Bryman (2016) argues that the deductive approach is too linear and follows a logical sequence that does not accommodate a researcher’s view of theory or literature that may have changed based on analysis of new data collected. Consequently, this research adopts the inductive approach, where theory is the outcome of research having drawn generalisable inferences by observation.

However, the application of the inductive approach is weakened by its limited scope and the inaccurate inferences in a research study (Bryman 2016; Saunders et al. 2016). Saunders et al. (2016) argue that the inductive approach is time-consuming considering the process of linking data and investigation of the problem where the phenomena occur.

The perceived inadequacies of inductive and deductive approaches led to the emergence of the abductive approach in a research study (Awuzie and McDermott 2017). While the inductive approach attempts to determine general rules in research study, the abductive approach seeks to identify the cause and effect relationship in the research study (Tavory and Timmermans 2019; Awuzie and McDermott 2017). Some scholars argue that the abductive approach can be applied with either the inductive and deductive approach to arrive at logical inferences and a design of theories (Bryman 2016; Saunders et al. 2016). Nevertheless, the abductive approach is more akin to the research mixed-method and is pragmatic perspective driven (Bryman 2016; Saunders et al. 2016). Accordingly, the abductive approach that combines both cognitive reasoning and quantitative data makes it entirely inapplicable to this research study which is qualitative driven.

This research study tries to gain insight into the underlying reasons, opinions, and the experience of top management and other employees of the NNPC that set the strategic direction in response to the environmental forces. Accordingly, it justifies the adoption of an inductive approach that exhibits a more flexible structure and allows changes as the research process progresses. These features of the inductive approach make it relevant and appropriate for this kind of study that describes, explains, and evaluates NNPC's growth strategies in response to the impact of environmental forces.

5.3 Research Methods

There are three primary research methods: the quantitative, qualitative, and mixed methods (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015). These scholars point out that qualitative methods is philosophically interpretivist and word-based. On the other hand, the quantitative method is philosophically positivistic driven and numerically inclined. They further opine that the mixed method emerged from the observed limitations of the qualitative and quantitative methods. According to these scholars, neither of the methods is superior to the other. Instead, the choice of either or both is underpinned by the researcher's philosophical stance (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015). This scholarly position illuminates Ackroyd and Hughes (1992) assertion that philosophical assumptions drive methodological preferences.

5.3.1 Quantitative Research Method

Creswell and Poth (2018) point out that the quantitative method is underpinned by meanings derived from numerical data in a standardised form. This entails the measurement and accurate reflection of the social world in numerical form using statistics and diagrams (Bryman 2016; Saunders et al. 2016; Easterby-Smith et al. 2015). According to these scholars, quantitative methods attempt to create generalisation about populations as knowledge is derived through valid and reliable statistical measurement methods. Admittedly, these scholars argue that qualitative studies can also support measurement. Nevertheless, the aim of qualitative researchers extends beyond the reliance on a number as a unit of analysis. Quantitative methods are predominantly associated with positivist philosophical assumptions, driven by a deductive approach using data to test theory (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016).

The positivist philosophical assumptions and deductive approach are not a characteristic of this study. This study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. Thus, the study aim aligns better with a qualitative method that provides answers to the "why", "how", and "what" questions of this study which are not numerically driven (Yin 2018). Saunders et al. (2016) point out that the quantitative method appears more suitable for controlled laboratory environmental conditions which are contrary to this study aim (section 1.4). Thus, determining the NNPC’s top management growth strategies and response mechanism to the impact of environmental forces is too difficult to quantify. This creates a significant limitation on the adoption of the quantitative method in this study. It requires other methods that is beyond the reliance on only numbers as a unit of analysis.

Notable scholars collaborate with the identified limitation of quantitative methods (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016). These scholars observe that quantitative methods are framed to obtain answers to research questions. However, the quantitative method does not provide an in-depth and comprehensive understanding of people's lives, experiences and justification for actions. This implies that quantitative methods isolate some variables of the study, regardless of the context in which they make meaning which makes them in the study context (Campbell et al. 2017; Saunders et al. 2016). Interestingly, this study is socially and behavioural driven, subject to human interaction and interpretations. Thus, the need to examine the qualitative method that is employed to explore NNPC's employee's understanding and experience of strategies, strategic issues and response mechanisms affecting the oil and gas industry.

5.3.2 Qualitative Method

The qualitative method emphasises words thus, makes the world visible rather than numbers in data collection and analysis (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016). This implies that the qualitative method pays attention to the constructed nature of reality, the quality of relationships, cause and effect that impact human behaviour. This is because the events reported and represented through the qualitative method are the personal experiences of the studied population (Hughes 2003). The qualitative approach provides an in-depth explanation of the creation process of social experience and meanings attributed to lived reality (Merriam and Tisdell 2015; Pickard 2013; Punch 2013). According to these scholars, the qualitative method derives theories and results from data collected, analysed, interpreted, and feedback gathered, which are appropriate for this research study. The study intends to critically evaluate the NNPC’s growth strategy in response to environmental forces affecting the oil and gas industry. This relates to understanding social experiences (Merriam and Tisdell 2015). Thus, it implies that the qualitative method seeks to question how social experiences emerge and how meaning is derived.

Scholars point out that the qualitative method involves an empirical investigation of a distinct contemporary event within a real-life context using the instruments of “semi-structured interview and unstructured interview”, “observation”, “physical artefacts”, “case studies”, and “documentation” (Creswell and Poth

2018; Yin 2018; Coolican 2017; Bryman 2016; Saunders et al. 2016). According to these scholars, the use of two or more of these identified instruments enhances the research process validity and reliability. These scholars suggest the use of notetaking and a diary during data collection in order to reflect on the process, the role and influence of the researcher in the research study.

According to Saunders et al. (2016), the "semi-structured interview" entails a variety of interviews whereby the interviewer begins with a set of interview topics. The interviewer is flexible, and the researcher is willing to change the order in which the questions are asked during the semi-structured interview session. Conversely, "unstructured interview" refers to a loosely deliberate and informally conducted interview. The unstructured interview begins with one or more topics to explore with respondents, but without a prearranged array of questions to gather desired information. "Observation" is concerned with the systematic description, recording, critical analysis, and interpretation of people's actions, inactions, experience or behaviour. "Documentation" involves written documents, e.g., diaries, notetaking, gazettes, minutes taking, report, pictures, tape and tape recording, film utilised in the research process to enhance validity and reliability. "Case studies are a comprehensive study which involves an empirical investigation of a distinct contemporary event within a real-life context" (Yin 2018). A case study can address the "how, what and why" components of research questions. "Physical artefacts" focus on a man-made tool or artwork that can act or complement information for a research study.

The qualitative methods appear suitable for this study. The qualitative method reveals the "why" which is the context of strategy, the "what", the content of strategy," and the "how" being the process of strategy.

Saunders et al. (2016) observe that the qualitative method is linked with the interpretivist philosophical stance as it seeks to make meaning from a socially constructed phenomenon under study. Yin (2018) supports this assertion by highlighting some key characteristics of qualitative methods; firstly, the qualitative method is applied to studying the meaning of people in real life events; secondly, presenting the views of participants under study effectively; thirdly, understanding the particular context within which the research participants act; fourthly, highlighting emerging concepts which gives a comprehensive explanation to social behaviour, and fifthly, the use of more than one source of evidence in the research study.

However, Creswell and Poth (2018) argue that the qualitative method lacks a rigorous scientific control mechanism and numerical data that could lead to generalisation. Qualitative methods entail the herculean task of data collection, analysis, interview transcription, themes identification and categorisation (Yin 2018; Bryman 2016; Saunders et al. 2016). The conscious and unconscious bias of the researcher in the research process is another observed limitation of the qualitative method (Bryman 2016; Saunders et al. 2016).

These perceived inadequacies of qualitative and quantitative methods led to the emergence of the mixed research method, which aims to bridge these gaps in research study.

5.3.3 Mixed Method

According to Creswell and Poth (2018), a mixed-method is a research approach that integrates both qualitative and quantitative research methods in a single research study to address research questions. The mixed-method is often applied in a research study to compensate for the observed individual limitations of qualitative and quantitative methods (Yin 2018; Bryman 2016; Saunders et al. 2016). The mixed-method approach adopts the integration of a particular type of qualitative method, e.g., semi-structured interview with either survey being a form of quantitative method to enable the researcher to cover the depth and breadth of a research study.

However, the mixed-method approach does not illuminate the essence of this study that is purely word-based and philosophically interpretivist, hence, not suitable for this study. The unsuitability of the mixed method in this study has further underpinned the assertion that methodological preferences are driven by the researcher's philosophical assumptions (Ackroyd and Hughes 1992). Consequently, the research will explore a word-based research method and aligns with the researcher's philosophical assumptions, such as qualitative methods.

5.4 Justification for the adoption of Qualitative Research Method

This research study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. This implies that this research intends to describe, explain, and explore the NNPC's growth strategies, environmental forces, and how the NNPC's management responds to these forces' impact on the in oil and industry. Hence, the qualitative method that seeks to understand a phenomenon, "strategic issues" is found suitable for achieving the study's overall aim (section 1.4). The qualitative methods underpinned by its identified features such as the socially constructed phenomenon under investigation, the researcher’s epistemological interpretivist philosophical stance, makes it apparent that the qualitative method appears suitable and appropriate for this study. Hence, its adoption for the study. The qualitative method is advised to be suitable and effective in answering the “why”, “the how”, and “the what” questions of research study (Yin 2018). Consequently, this study scope focuses on the "why” being the context, the "what” the content of strategy, and the "how" the process (The CCP Pettigrew 1988 model) aligns with the qualitative methods.

The qualitative method presents comprehensive information, subjective in interpretation, high in realism, reflexive and naturalistic in setting (Coolican 2017). Furthermore, Coolican (2017) observes that the qualitative method commences with the local viewpoint and progresses from an individual case to a broader understanding of human experience. Thus, it is apparent that the qualitative study results can also be generalised (Creswell and Poth 2018; Yin 2018). Coolican 2017; Bryman 2016; Saunders et al. 2016).

These key characteristics of the qualitative method will guide the researcher in this study to navigate through every phase of the research process.

5.5 Research Strategy

According to Denzin and Lincoln (2011), research strategy is the methodological link between the choice of data collection methods and the study’s philosophical assumptions. This implies that research strategy presents the researcher's blueprint about answering the research questions in a research study. Interestingly, every research method possesses a research strategy that is underpinned with a philosophical stance (Yin 2018).

This research is guided by the research questions, access to potential research participants and researcher philosophical assumptions. In addition, the study's research question is established on the exploratory approach, thus providing understanding that critically evaluates the research problem under investigation.

Creswell and Poth (2018) identified the narrative, phenomenological, grounded theory, ethnographic and case study approaches towards achieving qualitative research-based studies. However, a case study strategy appears suitable, providing an in-depth understanding of the complex environmental forces present within an organisation and knowledge of the top management response mechanism aimed at creating market viability. The adoption of a case study strategy in this study confirms Child and Smith’s (1987) assertions that the organisations are impacted by dynamic environmental forces and a multiplicity of possible dimensions from which to study the event, thus, justifying the adoption of case study strategy. This implies that the case study strategy will furnish sufficient insight into the interrelationship between identified environmental forces contributory to strategic issues and response mechanisms by top management in NNPC.

5.6 Case Study Strategy

According to Yin (2018), a case study is comprehensive involving an empirical investigation of a real-life phenomenon in their natural context. This implies that interest in individual cases defines case studies. A case study can address the "how, why, and what” components of this research, thus its preference in this research study (Yin 2018; Bryman 2016; Saunders et al. 2016). The benefit of the case study methodology cannot be overemphasised. Yin (2018) argues that case study deals with a full variety of evidence – documents, artefacts, interviews, and observations which is beyond what might be available in a conventional historical study.

On the other hand, O'Leary (2014) define case study to mean a method of studying societal elements by analysing and describing a single situation or a (individual, group or event). O'Leary (2014) further state that case study is a unit of study itself. This is because it can include a number of data collection methods, including survey. Similarly, Stake (1995), view case study a "holistic" (keen focus on mutual links between phenomenon and its context), "empirical" (underpinned by observation), "interpretive" (researcher's intuition), "emphatic" (emic perspective to reflect on how people think), and integrated method that values the different viewpoints and interpretations that researcher and participants have over a phenomenon. Stake further state that case study is a unit of analysis. This Stake's definition aligns with the study aim. Accordingly, this study views NNPC as a unit of analysis.

This study is a contemporary phenomenon with little or no control over the behaviour of research participants, thus making a case study approach necessary as endorsed scholarly (Yin 2018; Bryman 2016; Saunders et al. 2016). Similarly, the exploratory and explanatory nature, which allowed for critical analysis and richer understanding of the research content, context and process make case study strategy appropriate (Creswell and Poth 2018; Yin 2018). Thus, the researcher can draw attention to what can be understood about the experience of the NNPC’s top management and employees on strategy direction, the strategic issues and response mechanisms affecting the oil and gas industry.

Creswell and Poth (2018) point out that a case study strategy is underpinned by time and activity. This allows the researcher to employ various data collection procedures over a time frame in this research. Besides, the case study strategy can unveil the hidden dynamics in this research investigation, as Blumberg et al. (2014) observed. Yin (2018) points out that a case study provides results that are considered robust for this kind of explorative, explanative and inductive approach. Underpinned by the exploratory, explanatory, and inductiveness of this study, the case study strategy aims to comprehensively understand the interrelationship between the NNPC strategic direction, the environmental forces contributory to the strategic issues, and response mechanism employed by top management.

Yin (2018) identified two variants of case study design in research study: single-case and multiple case design. This design categorisation potentially makes case study stronger and easier to conduct in a research study. Yin (2018) observes that the primary distinction between these two variants is in the study design decision before data collection. The single-case design focuses on an empirical enquiry into a contemporary phenomenon within its real-life context. On the other hand, the multiple-case design deals with two or more cases, especially in a comparative context. Nevertheless, these two variants aim to collect comprehensive data, report a case(s) description, case themes and critical analysis of the collected data (Creswell and Poth 2018).

Coolican (2017) observes that a case study strategy enjoys particular interest by researchers; this is due to its uniqueness in the identification of a peculiar process from an individual case. Nevertheless, Coolican also claims that case study strategy findings are not generalisable when applied to test a hypothesis. But Yin (2018) points out that the result derived from a composite unit within a group can be generalised. This is because general laws are applied in an analysis of the particular case (Creswell and Poth 2018; Yin 2018). Thus, Yin offered clarification of the Coolican (2017) stance on the case study strategy's generalisation context.

This research study aims not to make statistical generalisation but rather to expand theories in the strategic management space.

Nevertheless, Niculovic et al. (2012), point out that critiques of the case study strategy emphasize the lack of rigour in this approach. This implies that the researcher may not have applied systematic procedures in the research study due to bias to influence research findings. The researcher addressed this assertion by employing multiple methods of data collection, such as in-depth semi- structured interview, observation, and documentation, thereby guaranteeing that systematic data collection procedures were adhered in the data management stage.

To avoid researcher bias and skewness, research validity and reliability was made possible through the adherence to the reflexive approach (Straus 1987). Accordingly, reporting all data collected, thereby preventing any form of bias during the various phases of the research study.

Admittedly, several scholars have observed that case studies research requires a large amount of data and also a time-consuming research exercise (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016; Easterby-Smith et al. 2015; Silverman 2013). This scholarly assertion resonates with researcher experience of the fieldwork. However, interview transcripts, diaries and company documents have been edited and condensed to ensure the readability of the result of the findings. The researcher made this possible through the utilisation of CAQDAS–Nvivo 11 that complemented the data management phase. CAQDAS–

Nvivo 11 provides a timely opportunity to conduct a research study in a systematic pattern.

Another notable advantage of the case studies research is that it allows the researcher to commence their analysis of data even while the data collection process is in progress (Yin 2018). However, case study research can challenge a theory, as observed by Coolican (2017). This is because one contrary case is sufficient to contradict a theory or an assumed phenomenon. However, case study research allows the researcher to collect data from different individual studies for transcription, theme identification and categorisation, and data analysis (Yin 2018). This leads to the development of theory aimed at promoting case research study.

Regardless of the presumed limitations of this method, case studies provide an in-depth description of events in NNPC that will aid in achieving the overall aim of the study which other methods do not offer (Creswell and Poth 2018; Yin 2018).

Recall, too, that the case studies can be descriptive, exploratory and explanatory (Yin 2018). The exploratory case study approach compels the researcher to explore and understand real-life, contemporary single or multiple cases (Creswell and Poth 2018).

This study is industry-specific, focusing on the NNPC as a case, thus the justification for adopting single-case design via the instrument of an in-depth-semi-structured interview. This enables the researcher to collect comprehensive data, report a case description, case themes, and critical analysis of the data (Creswell and Poth 2018).

Yin (2018) points out five rationales for the adoption of single-case design in research study to include "revelatory", "longitudinal", "common", "unusual", and "critical". "Revelatory" describes a situation whereby the researcher has the opportunity to critically observe and evaluate a phenomenon that was previously not accessible in research study. "Longitudinal" captures the time essence of a study. This is in relation to how certain conditions and underlying procedures change over time. "Common", this construct focuses on the conditions and circumstances of an everyday event. This refers to the objective of the social process in relation to some theoretical interest (Yin 2018). "Unusual or unique", this is a deviation from everyday circumstance or theoretical norms. Finally, the construct of “critical” entails selecting a theory or theoretical propositions. This implies specifying a clear set of conditions within which a theory or theoretical propositions are accepted to be true.

This study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. The NNPC is a single-case that appears to exhibit some of these rationales as observed by Yin (2018), for instance, revelatory, longitudinal, and unusual or unique. Therefore, the study seeks to reveal what constitutes or what does not include the top management growth strategies, environmental forces and response mechanism to these forces.

5.6.1 Case Selection Criteria

The five rationales for the adoption of single-case design e.g., “revelatory”, “longitudinal”, “common”, “unusual”, and “critical” significantly determine the case selection criteria (Yin 2018). The goal of case selection criteria is to identify the final case properly, before the commencement of data collection in a research study (Creswell and Poth 2018; Yin 2018). The identification of the "case" in a research study enables the researcher to gain a comprehensive understanding of the phenomenon under investigation. This study aims to critically evaluate the impact of environmental forces on NNPC’s growth strategy and profitability. The Nigerian oil and gas industry and the NNPC provide an in-depth learning opportunity about growth strategies, strategic issues, and the NNPC top management response mechanism to the identified environmental forces in section 2.1.

5.6.2 Unit of Analysis

A typical unit of analysis includes the individuals, groups, social and organisations under investigation (Creswell and Poth 2018; Yin 2018; Saunders et al. 2016; Matusov 2007; Stake 1995). These scholars posit that factors, such as the purpose of the researcher, research questions and research instrument shape unit(s) of analysis.

The researcher selects the appropriate unit of analysis based on these factors that were specifically designed to identify the data that was collected for the study. In the context of this research study, the unit of analysis refers to top management and other employees, e.g., managers, supervisors, NASS members and NNPC customers who are engaged in setting the strategic direction for the NNPC.

Data collection commenced with secondary data acquired from NNPC's publications, gazettes, bulletins, and websites. This influenced the questions asked during the interview for cross-validation. The researcher engaged and elicited primary data via an in-depth semi-structured interview from a purposeful sample of twenty-one (21) research participants. Nine of these participants are employees of top management of NNPC, Nigeria, and four are mid-level managers, four are customers of NNPC, and remaining four participants are National Assembly (NASS) committee members with oversight responsibilities in the upstream and downstream segment of the Nigerian oil and gas industry.

The primary data was thematically analysed using the inductive approach (Creswell and Poth 2018). A combination of NNPC employees, customers and NASS committee members were selected to achieve an unbiased opinion. In-depth semi-structured interviews were advocated and applied since it accommodated asking incisive questions, thereby allowing for follow-up questions and comprehensive engagement (Kvale 1996).

The researcher recorded and listened to the interviews; then manually transcribed to achieve a comprehensive understanding of the data (Braun and Clarke 2006). Transcribed data were coded into structured codes; thus, themes would be derived following hierarchical categorisation (Yin 2018). This led to a summary of results, description, and critical analysis. The transcribed data was revalidated with the research participants in NNPC and NASS before the outcome of result and discussion (Yin 2018). Nvivo guided the study (Creswell and Poth 2017) while the analytical thinking was being undertaken by the researcher (Marshall and Rossman 2015).

The purposeful sample (NNPC employees, customers, and NASS committee) as explained in Section 5.6.3 allowed the researcher to explore the participant’s understanding and experience of growth strategies, strategic issues and response mechanisms affecting the oil and gas industry.

5.6.3 Key Justification for the Selection of Single Case Study

According to Flyvbjerg (2006), similar to Ruddin (2006) a case study is a comprehensive assessment of a single example, which can provide reliable information about the broader class and can be generalised. Flyvbjerg (2006) further argues that multiple case study due to the belief of its generalizable attribute, stemming from a representative and random sample selection process, may not be appropriate to gaining in-depth insight and rich information regarding a phenomenon. Although generalisation has been the singular and major criteria used in validating scientific enquiry (Ravenswood 2011; Eisenhardt and Graebner 2007; Flyvbjerg 2006) these scholars argue that even though generalisation is important to building shared knowledge (theory), collective knowledge should not be determined by conventional generalisation alone as it is but one way to knowledge collection. This is because, "descriptive phenomenological" case with no generalisation can also add value to innovation in science (Flyvbjerg 2006 pp.227).

Again, contrary to the widely held opinion that a single case study is relevant only for generating hypotheses in the early stages of research (Campbell 1975) hence limiting generalisation of findings and consequently has little or no relevance in the development and proposition of theory. Flyvbjerg (2006) argues that, a deliberate (purposive) selection of a case (Ragin and Becker 1992) within a phenomenon enables for the inclusion of several actors and exploration of various processes. Thus, disclosing rich information regarding the major causes of an underlying issue and its consequences within a given phenomenon. This process is useful not only at the phases of theory-building but most essential in the development and proposition of theories (Ridder 2017; Rudding 2006; Flyvbjerg 2006). In this study, NNPC was strategically selected being the nationalised oil company and critical stakeholder in the oil and gas industry, and sole distributor in Nigeria, as well as the major source of revenue generation for the country (World Bank 2019). Hence the growth and profitability of the NNPC and its subsidiaries is not relevant for the organisation only but crucial for the growth of private organisations within the sector and the economic growth of the nation depending on it (Akinrele 2016; Victor et al. 2012; Tordo et al. 2011; Oyewunmi and Olujobi 2011 Nwokeji 2007). Thus, it was selected as the deeper cause of a problem of which solution lies within, meaning while the NNPC served as a mirror for other oil and gas within Nigeria and developing countries with similar characteristics, better growth strategies within the NNPC evolving from the study will be relevant to increasing the productivity of other organisations within the sector and other developing countries through, theoretical proposition. This single case allowed for the exploration of various actors contributing to the decision-making process within the NNPC (NASS and top management) representing the government as well as those depending on the organisation for their own growth and profitability (customers). The inclusion of the aforementioned actors therefore contributed to understanding the impact of environmental forces on the corporation's growth strategy and profitability and by implication its consequences on the organisations and its customers.

Above all an in-depth understanding of existing problems affecting the development and deployment of strategy in the organisataion was instrumental in the contribution to theory and the existing framework.

5.6.4 Selection of Sample and Size

Sampling is the process of identifying and precisely defining a representative group from a population under investigation (Creswell and Poth 2018; Yin 2018;

Saunders et al. 2016; Burns 2000). According to these scholars, sampling enables the researcher to save time, effort, and also achieve an unbiased explanation of the phenomenon under study. This scholarly assertion aligns with the Janesick (1994) stance on sampling. Janesick points out that the researcher must consider the needs of the study in sample selection. This implies that the representative group from a population under investigation have knowledge and experience to address the phenomenon under study. She also asserts that sample size selection is dependent on the research objectives and research questions of the study.

Sampling in a research study is categorised into probability and non-probability methods (Creswell and Poth 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016; Easterby-Smith et al. 2015). According to these scholars, the probability sampling method is a sampling technique whereby representatives from a larger population are selected using a method underpinned by the theory of probability. This implies that every member of the population under investigation has a known and equal opportunity to be selected in the study. Different probability sampling methods include simple random, stratified random, systematic random, cluster random, and multi-stage random methods. The probabilistic sampling method is not suitable for this kind of field research where data collection was not based on either ease of access to data nor the identified probability sampling methods based on the theory of probability. This is a field-driven research study. Consequently, to access data, the researcher had to obtain a hidden population that was not influenced by the theory of probability, as noted by Bernard (1995). Instead, the sample size for the study accommodated respondents who are equipped to engage in the discourse of strategic issues, growth strategy and response mechanism about the impact of environmental forces in the oil and gas industry.

The deployed sampling method appears to align with the non-probability sampling method, e.g., convenience sampling, haphazard, volunteer, snowball, quota sampling and purposive sampling method (Creswell and Poth 2018; Yin 2018; Bryman 2016; Campbell et at. 2016; Saunders et al. 2016; Easterby-Smith et al. 2015).

This case study research applies a purposeful sampling method (Yin 2018). This makes the convenience sampling, haphazard, volunteer, snowball, quota sampling inapplicable because of the higher likelihood of research bias. Similarly, the likelihood of bias may also develop in purposive sampling, underpinned by researcher knowledge of the representative population under investigation. However, the researcher mitigated the possibility of this bias by employing a purposeful sample technique informed by the needs of the research study, research objectives and research questions of the study, as pointed out by Janesick (1994). This implies that the research sample size is chosen based on the respondent's in-depth experience and understanding of the research topic under investigation (Creswell and Poth 2018; Yin 2018). The representative sample includes a purposeful sample of twenty-one (21) research participants. Morse (2000), points out that there is no rule regarding the sample size in qualitative research. It depends on some key determinant, e.g., the scope of the study, nature of research topic, quality of data, study design, and the utilisation of shadow data (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Morse 2000).

This selected purposeful sample of 21 research participants is most effective in this kind of study that requires knowledgeable people as scholarly advised (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016). To complement the purposeful sampling due to the busy schedule of some of the proposed research participants, snowballing sampling was introduced to enhance the sample size. The adopted snowballing sample created the opportunity to include key individuals who are relevant to the growth strategy and profitability of the NNPC. Interestingly, the introduced snowballing sample helps to enhance access to some NNPC top management, customers, and customers with limited time and cost implications. These respondents were critically examined via in-depth semi-structured interviews on themes of strategic issues, growth strategy and response mechanism about the impact of environmental forces in the oil and gas industry. All the respondents selected and invited were qualified to comprehensively answer the research questions (section 1.3) derived from the research objectives. This is because of the participant expertise knowledge acquired from work experience in the subject matter with reference to the oil and gas industry.

The research study also attempted to collect archival samples from several sub-units of the NNPC by applying a blend of sources which includes memos, gazettes, online reports and other publications by the Nigerian oil and gas industry. These several sources aimed at addressing the issues of generalisation peculiar to the purposeful sampling method.

The demographic profile of the research participants for this study shown below provides a better understanding of the participant's perception on strategy, growth strategy, strategic issues, and response to environmental forces on the NNPC, Nigeria.

A concise and precise demographic profile of the research participants from the 36 states, six geopolitical zones (North-central, North-West, North-East, South-South, South-East and South-West) is presented in table 7. Each of these zones is represented in the affairs of the NNPC, given that the NNPC is the major source of revenue in the country. It is believed that representation will bring transparency to the management of the NNPC (NNPC). Customers/partners of oil companies were selected based on referrals from NNPC research participants underpinned by the company's long-standing business relationship.

To maintain the anonymity and confidentiality of the research participant, no participant will be identified in this research study and no reference will be attributable to a research participant in person or the company the participant represents. Accordingly, acronyms starting with NNPCPART plus two number digits are used to represent the research participant's name in the main fieldwork (interview session) as presented in table 6.

Table 6 : Demographic profile of participants

S/N	Participant Pseudonym	Age	Gender	Length of service in the Oil & Gas Industry	Years in management
	Senior Management				
1	NNPCPART01	58	Male	33	17
2	NNPCPART02	58	Male	34	14
3	NNPCPART03	55	Male	30	13
4	NNPCPART04	56	Female	28	9
5	NNPCPART05	59	Female	36	14
6	NNPCPART06	54	Male	27	8
7	NNPCPART07	58	Male	30	8
8	NNPCPART08	54	Male	30	6
9	NNPCPART09	51	Male	26	6
	Mid-Level Management				
10	NNPCPART10	44	Male	17	-
11	NNPCPART11	46	Male	15	-
12	NNPCPART12	48	Male	24	-
13	NNPCPART13	42	Female	18	
	NASS MEMBERS – Oil & Gas Upstream Midstream, and Downstream Sector				
14	NNPCPART14	58	Male	19	12
15	NNPCPART15	42	Female	12	7
16	NNPCPART16	46	Male	3	7
17	NNPCPART17	48	Male	7	11
	Customers/partners of NNPC				
18	NNPCPART18	61	Male	34	30
19	NNPCPART19	53	Female	32	17
20	NNPCPART20	56	Male	29	20
21	NNPCPART21	51	Female	26	15

Source: Author generated based on data collected and analysed.

The conduct of the in-depth semi-structured interviews and the condition under which the interviews were conducted is provided in the next section.

The next section present insight into data source, the interview process, interview questions, in-depth semi-structured interview, observation and documentation, validity and reliability of research methods, exploratory study, pilot study, reflexivity, and methods of data analysis in this research study.

5.7 Exploratory Study

An exploratory study was undertaken in London in November 2017. The qualitative case study approach was applied in view of the study aim and objectives that align with this approach. The exploratory study took the format of an unstructured discussion session in both London and Reading with the purpose of understanding the suitability of the research instruments. This exploratory study aims to explore the key environmental forces impacting on the growth strategy and profitability of the NNPC, Nigeria. The process of the exploratory study started by employing the contact list generated during Society of Petroleum Engineers (SPE) held in Aberdeen in 2017. This SPE event had participants from the Nigerian oil and gas industry. The researcher also received a referral from PTDF, being a part-sponsor of the PhD degree programme. These referrals were significant in the course of the whole data collection process. Telephone calls were made to enable the researcher to access the email address of the selected research participants. Having received the email addresses, emails were sent to eight participants in order to communicate the essence, persuade them to participate in the study, secure participant consent, agree for the venue and mutual time (Yin 2018). Unfortunately, only two responses were received from the eight emails originally sent to employees of the NNPC.

Underpinned by this low mail response rate, the researcher employed the telephone call option as a technique to engage these mapped research participants. The use of telephone calls yielded a positive outcome. Five participants indicated their willingness to participate in the exploratory study. Interestingly, one participant informed the researcher of the scheduled executive management training billed for London and Reading (UK). The researcher made more telephone calls to ascertain the date of the executive management training, the venue, and the number of employees scheduled for this UK training event.

One of the NNPC employee communicated the details of some of the employees scheduled for this UK training event on November 3rd 2017. Accordingly, the researcher booked EasyJet flight, booked hotel accommodation in London and Reading respectively. Eventually, the researcher travelled to London on November 30th, 2017 and returned via the Reading route on the 2nd December 2017.

Upon arrival at the agreed venue in London, the scheduled discussion took the form of focus group and eventually progressed into a semi-structured pattern at Canary Wharf. The discussion sessions primarily focused on exploring strategic issues in the NNPC and the environmental forces that influence the NNPC's strategic direction.

The process of data collection begun with a focus group. However, focus group data collection process was aborted. This is because of low level of participant's participation. Accordingly, the researcher employed the process of data collected through semi-structured interviews from the team of five NNPC top management staff. The semi-structured interviews lasted between 40 minutes to 60 minutes. The researcher obtained rich data about NNPC's strategy issues and the environmental forces that influence NNPC's strategic direction.

The semi-structured interview was not audio-recorded at this stage as permission was not granted at this exploratory stage of the study (Creswell and Poth 2018). Nevertheless, the collected data was manually transcribed (Creswell and Poth 2018). Recurring themes identified from this exploratory study include NNPC's growth objectives, growth strategies, human resources challenges, funding gap, dwindling revenue, skill gap, insecurity in the Niger Delta region, government interference, and recruitment challenges. The research participants have also validated these themes via mail.

Extracts from the exploratory study have contributed to generating new themes for the literature and reframing of the research questions. The exercise has further confirmed the accessibility of data that will be required during the pilot study and the entire research. Underpinned by the experience of the exploratory study, the researcher returned to Aberdeen to further engage with literature and prepare for the pilot study phase of the study.

5.8 Pilot case study

This was undertaken between June 6th and June 09, 2018 in London and Reading respectively. Yin (2018) refers to a pilot case study as a preliminary study undertaken to evaluate research feasibility, refine data collection plans, ascertain cost implications, and the duration required for the data collection process. A pilot case study recognises the procedures to be followed and the content of the data in a study. A pilot case study is formative and supports the researcher in developing research questions and providing conceptual clarification for the research design before the performance of scale research study (Creswell and Poth 2018; Yin 2018).

The researcher conducted a pilot case study to critically examine the reliability and validity of the research questions, preliminary methodology and methods. The conducted pilot study revealed ambiguity in some questions earlier discussed in the exploratory study. Guardians of the actual data collection process were provided by a team of five top management staff of the NNPC in London. Interestingly, this team of five top management staff of the NNPC were included in the overall research participants during the fieldwork trip in Nigeria.

In light of engagement with the literature about strategic issues and environmental forces influencing the strategic direction of an organisation, as presented in section 2.2, it was necessary to conduct a pilot study to determine if there are existing strategies in the NNPC, and how strategies are formulated and implemented in the NNPC. An attempt was made to explore the key environmental forces influencing the strategic direction of the NNPC, Nigeria. Some of the relevant data collected from the pilot study were integrated into chapter six.

5.9 Data Sources

This research study utilised data collected through in-depth semi-structured interviews with 21 research participants. Nine (9) of these participants are in the senior management cadre that is involved in setting the strategic direction for the NNPC, four (4) of the participants are middle management level that are engaged in the strategy implementation process, and four (4) of these participants are committee members of the upstream and downstream of the Nigerian oil and gas industry in the National Assembly (NASS), being regulators and critical stakeholders in the Nigerian oil and gas industry. The remaining four (4) participants are key customers/partners of NNPC. It is worthy of note that five participants from the exploratory and pilot study form part of the final twenty-one research participants in this study.

The data collection process commenced in March 2018 with an exploratory study conducted in London. This was immediately followed by a pilot study in June 2018 in London and Reading. Administration of reviewed interview questions (fieldwork) based on the input of the exploratory study, pilot study respondents, and supervisory team's input was from November 5th, 2018 to December 11th 2018; that is the fieldwork lasted for 37 days in the NNPC towers (Head Quarters), Abuja, Nigeria. The in-depth semi-structured interviews were recorded, including manual note-taking. Data transcription and analysis was thematically executed using NVIVO 11 software.

5.10 The Interview Process

The researcher designed interview was pretested on five (5) NNPC employees during the exploratory London visit and the pilot study in London and Reading. These employees visited the United Kingdom for a four-week executive management retreat. Interestingly, these employees include top and mid-management level staff from different Strategic Business Units (SBUs) of the NNPC. All these employees are central in the design of the strategic direction of NNPC.

The researcher commenced the interview process by asking basic questions and then progressed to the central theme of the research questions that states the elements of strategic issues, growth strategy and response mechanism about environmental forces in the oil and gas industry, particularly, the NNPC, Nigeria. The questions were not ambiguous nor coated with technical words to ensure clarity and understanding by the respondents. Leading questions were avoided; this was to allow the respondents opportunity for total expression of their experience and beliefs on the subject matter. Thirteen respondents from the NNPC were interviewed and four committee members from NASS, Abuja and four customers of NNPC. The total number was twenty-one respondents. The selected sample for the research interview were given the interview guide before the interview dates along with the consent form in line with RGU ethical research standards. The interview guide was also given to these respondents immediately the researcher arrived in Abuja, from Aberdeen, based on established access to NNPC towers by the researcher. This interview guide captures the expected interview duration, interview questions and details of the researcher. The interview period lasted 37 days in Nigeria, while each interview session lasted between 90 minutes to 2 hours. The researcher experienced delays due to rescheduling of appointment dates due to the busy nature of some of the top management staff.

Some of the interview sessions were marked by regular official telephone interruption during work hours in the office. To avoid unnecessary disruption and loss of information during the interview session, the researcher deployed a tape recorder which was borrowed from the Aberdeen Business School (ABS) Media Department. The interview was audio-recorded in the respective offices of the respondents in NNPC Head Office in Abuja along with manual note-taking by the researcher in all these interview sessions. The manual note-taking was to complement the audio recording device to avoid technical failure on the part of the audio-recorder that could lead to loss of relevant information.

Interestingly, most of these respondents demonstrated enthusiasm for the research topic. However, the researcher was confronted with the challenge of limited time with the respondents and interruption by other senior employees of the organisation that usually walked in during the interview sessions. The audio-recorded interview was then listened to several times and then manually converted into a handwritten format. Finally, the handwritten version of the interview was transcribed to gain a comprehensive understanding of the themes discussed in the interview. Nvivo 11 was employed after the transcription to sort the data, which was subsequently coded, and then into structured codes. The themes were generated from these structured codes, then followed by hierarchical categorisation on the Nvivo 11 application software.

Extracts from the entire interview process informed the data analysis section that is discussed in the next chapter.

5.10.1 Interview Questions

Prior to the exploratory pilot study, and fieldwork (data collection), the researcher developed an interview guide This action aims at avoiding ambiguity, challenging questions, leading questions, and respondent privacy invasion as scholarly suggested (Creswell and Poth 2018; Yin 2018; Saunders et al. 2016).

The supervisory team reviewed the interview questions, and all the complicated aspects of the data collection process were addressed. Clarity, appropriateness, and endorsement of the interview questions that align with the research aim and objectives (section 1.4) were achieved.

The researcher leveraged on the existing exploratory, pilot study respondents and other relevant contacts based on snowballing by these established contacts. Referrals from industry players were also included, e.g., the National Assembly (NASS) committee members with oversight responsibilities in the upstream and downstream segment of the Nigerian oil and gas industry and NNPC's customers. This action guaranteed some level of quick response and a high response rate from these identified research respondents. The researcher avoided interference with one of the completed interview questions that was sent via email to the researcher after the field trip. All the audio-recorded interviews, photocopied documents, memos, gazettes were safely and securely guarded electronically (encrypted) in both pen-drives, desktop, and cloud. Thereafter, this data was sorted, listened to several times and manually transcribed by the researcher.

The researcher progressed to manage bias that could emerge from wrong or inappropriate record-keeping by utilising CAQDAS – Nvivo 11. CAQDAS – Nvivo 11 was employed to store all the collected records of the fieldwork in preparation for the data analysis process. Using Nvivo also provided the opportunity for a systematic way of analysing the research.

5.10.2 Interview Technique

The in-depth, semi-structured, and unstructured interview techniques are scholarly identified in any qualitative research study (Creswell and Poth 2018; Yin 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016; Easterby-Smith et al. 2015).

Firstly, the in-depth interviewing technique involves undertaking intensive individual interviews with a small number of research participants to explore their opinions of a specific event (Bryman 2016; 2016; Saunders et al. 2016). These scholars state that the advantages of employing in-depth techniques include the opportunity to probe the interviewee, thereby obtaining a comprehensive response. These scholars argue that the in-depth interviewing technique utilises high quality research sample compared to other data collection methods. This is because in-depth interviewing technique applies purposeful sampling method in the selection of interviewees. In-depth interviewing technique has no elements of peer pressure dynamics common to other methods such as focus groups as scholarly observed.

The in-depth interviewing technique is time consuming considering the need to conduct transcription, data organisation, analysis, and data reporting (Creswell and Poth 2018; Yin 2018; Bryman 2016; Campbell et al. 2016; Saunders et al. 2016). Research participants must be carefully selected to mitigate against bias, and this may result in a vetting process (Yin 2018; Bryman 2016; Saunders et al. 2016). Furthermore, these scholars claim that in-depth interviewing technique require skilled personnel to conduct this kind of interview or the whole interview process could be undermined.

Secondly, semi-structured interview technique entails data collection whereby the researcher elicits information from the interviewees in a series of predetermined but open-ended questions (Bryman 2016; Campbell et al. 2016; Saunders et al. 2016). These scholars observe that the in-depth-semi-structured interview technique creates room for creativity during the question-and-answer session. This method presents tailored questions based on the research participants experience because of the established rapport. Conversely, this technique is also time consuming and skilled personnel are required to conduct the interview process (Bryman 2016; Saunders et al. 2016).

Lastly, unstructured interview technique is a flexible approach that does not employ any set of questions. Instead, the researcher asks open-ended questions underpinned by the research topic. A key component of the unstructured interview technique is the natural flow of conversation during the interview session. However, it is not suitable for all kinds of research participants and research aims.

This is because there are chances that the interview could be diverted from the entire interview focus as scholarly argued (Bryman 2016; Saunders et al. 2016).

The common element between all these types of interviews is the interactional exchange of dialogue that exists (Bryman 2016; Campbell et al. 2016); Saunders et al. 2016). The interactional exchange of dialogue exists on a face to face basis, telephone calls, electronic platform (internet, skype, zoom, amongst others).

The researcher designed an interview guide and combined in-depth semi-structured technique underpinned by the advantages of these two techniques in this study. Thus, the in-depth semi-structured interview technique was applied in this study to enhance a comprehensive collection of data from the research respondents, as suggested by Yin (2018).

5.10.3 In-depth Semi-Structured Interview

The in-depth semi-structured interview aims to gather primary data on themes of strategic issues, growth strategy and response mechanism about the impact of environmental forces in the oil and gas industry from the respondent experience, values, and perception. In-depth semi-structured interviews were utilised considering its flexibility and ability to accommodate asking incisive questions about the phenomena under investigation. The in-depth semi-structured interview allows follow-up questions and comprehensive engagement (Kvale 1996).

All the interview sessions were audio-recorded. The employed audio-recorder aims at collecting and saving detailed and uninterrupted flow of thought during the interview session. Saunders et al. (2016), point out that note-taking to complement audio-recording in the interview process is essential in data collection. Note-taking also provides exact nature explanation that may be lost as well as the general point of value in the discourse (Yin 2018, Saunders et al. 2016).

The researcher complemented the audio recording device by manually taking notes of all the interview sessions on a designated note pad. This was aimed at mitigating against technical failure and loss of valuable explanation or information by the recording device that was borrowed from Aberdeen Business School of the University.

5.11 Observation and Documentation Methods

As Yin (2018) suggested, the researcher carefully noted and recorded all the activities of those observed in this research study. According to Marshall and Rossman (1989), observation is the systematic description of events, behaviours, artefacts in the social setting chosen for study. There is scholarly argument that participant observation and documentation align with epistemological interpretivist philosophy (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016). Cohen et al. 2013). In this study, observation and documentation were made possible by leveraging the existing researcher contacts in the oil and gas industry and referrals from the exploratory and pilot study. The letter of introduction that the research supervisor endorsed also complemented granting access to relevant offices in the NNPC towers (Head Quarters), Abuja and the NNPC library in the NNPC towers, where relevant documents, memos were accessed and copied by the researcher.

In conclusion, participant observation and documentation avail the researcher the opportunity to capture the interviewee's body language, facial expression and general disposition about the research aim, which is to critically evaluate the growth strategies adopted by the Nigerian National Petroleum Corporation (NNPC) in response to environmental forces affecting the oil and gas industry. The participant observation element of the study was not captured in the transcript, but it provided a holistic approach to the collected data process in this study.

5.12 Ethical consideration

The exploratory study, pilot study, and fieldwork were bound by the ethical standards of conduct set out in the Research Ethics Student and Supervisor Assessment form (RESSA). The research topic was approved by the University through the RESSA form before the researcher commenced the studies. Researchers are expectedly required to disclose all aspects of the research that have the potential to affect the stakeholders in the research study. All the respondents were informed about the study aim, the study proposed research impact and, the importance of their participation. Their consent was obtained through the advised Robert Gordon University consent form in line with Yin's

(2018) suggestion. Ethical expectation ensured that the confidentiality and anonymity of the participants was maintained (Yin 2018). The researcher anonymised all research participants in the exploratory, pilot and fieldwork. The confidentiality of all participants was also maintained in all phases of the data collection process.

All the collected data is electronically secured by the researcher (both pen-drives, desktop, and cloud.), until after successful graduation to ensure data is safely back-up, secured and confidentiality maintained. The researcher will safely dispose of this acquired data at the end of the PhD degree.

Hence, the researcher met the stipulated RESSA requirements of a PhD degree study.

5.13 Validity and Reliability of Research Methods

Yin (2018) points out that the research design aim is to represent a logical report and the quality of any given research design can only be determined according to certain sequential tests. Four tests identified in conducting empirical social study include "construct validity", "internal validity", "external validity", and "reliability" (Creswell and Poth 2018; Yin 2018; Saunders et al. 2016).

"Construct validity" is concerned with the identification of appropriate operational measures for the concepts under investigation. It also entails collection data from multiple sources in a research study. "Internal validity" focuses on explanatory studies only and not exploratory or descriptive studies. According to Yin (2018), internal validity seeks to establish a causal relationship. This implies that certain conditions trigger other conditions in research studies. "External validity" is about whether and how the findings from a case study can be generalised. Finally, "reliability" is concerned with demonstrating that the operations of a study or data collection procedures can be repeated, with the same results (Creswell and Poth 2018; Yin 2018).

To achieve the test of a pass in validity and reliability in this research study, Yin (2018) recommended various evidence, e.g., artefacts, direct and participant observation, documents, and interview. Accordingly, the researcher applied the following actions in the study to achieve the test of a pass in validity and reliability:

5.14 Reflexivity

Qualitative research is often criticised for being biased (Creswell and Poth 2018; Bryman 2016; Saunders et al. 2016; Denzin and Lincoln 2011). Social science research uses reflexivity to explore and deal with any bias emanating from the relationship between the researcher and the phenomena under investigation (Creswell and Poth 2018; Saunders et al. 2016). The researcher acknowledges this scholarly claim as being a central factor in this research process. The researcher deployed reflexivity in this study and context to produce new reality in literary narratives as suggested by Holstein and Gubrium (1994).

The researcher took a detached approach by ignoring the role of the researcher in the research process to achieve validity and reliability by using memo writing for a reflective purpose. The researcher guaranteed reflexivity by employing in-depth semi-structured interview and interpretation of data collected about the NNPC. The applied in-depth semi-structured interview provided comprehensive data. This was dependent on the researcher ability to establish a good rapport with the research respondents. The researcher acknowledges the varied experience of the research respondents, which would have been limited through the quantitative method. The research respondents provided a rich account of their involvement in the context of strategy, change management, and the impact of environmental forces on NNPC growth strategy and profitability.

The researcher commenced the research study with the interpretivist mindset aimed at providing a thorough interpretation of the case under investigation. Gummesson (2003) argues that all research is interpretive, as such, social researchers should be careful of the researcher's preunderstanding of the case under investigation. This is a common pitfall in social science research, as observed by this scholar. Preunderstanding pertains to the researcher's knowledge before starting the research journey about the social environment or a specific phenomenon (Gummesson 2003). The researcher of this study argues that he does not have preunderstanding nor prior oil and gas experience, having worked in the banking industry for over a decade, and the research at inception focused on achieving competitive advantage in the banking industry. However, precautionary measures were applied and adhered to, thus reducing such prejudice since the researcher has been exposed to trends in the oil and gas through the exploratory, pilot study and engagement with the literature during this research study.

5.15. Methods of Data Analysis

Previous sections have extensively discussed data source, the interview process, interview questions, interview technique, in-depth semi-structured interview, amongst others in this study. This section further outlines the method used for data analysis adopted in addressing the overarching question that guide this research study.

Qualitative data analysis entails developing an awareness of the kinds of data that can be critically examined along with how the description is reached and comprehensively explained (Gibbs 2009). Gibbs (2009) further notes that qualitative data analysis involves several functional activities that help with the kind of data and the volume of data that need to be examined. According to Yin (2018), these functional activities include organising the gathered data, undertaking a preliminary read-through of the database, coding and organising the themes, representing the data, and creating an interpretation of the data.

In this study, these functions are interconnected and create a spiral of activities that are all related to the analysis and representation of the collected data (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). These scholars believe that data analysis is the process of inspecting, preparing, and organising the data (text data as transcript, or image data as in photographs) for analysis. According to these scholars, this process is followed by reducing the data into themes through the process of coding, condensing the codes; and finally, representing the data in either a tabular form, figures, or as a discourse.

This research study is qualitative driven and most qualitative research entails data preparation, data organisation prior data analysis (Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). To achieve data analysis in qualitative research, three key steps are advised (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). These steps are data transcription, data coding, and lastly, data analysis.

5.15.1 Data Transcription

The researcher commenced by recognising the importance of this first step (data transcription) in this study by importing the recorded interviews in the ABS media tape recorder into the researcher's personalised university desktop in the ABS Research Hub. This was done upon the researcher's return from the fieldwork in NNPC Towers, Abuja, Nigeria. This importation action was followed by manual conversion of the recorded information into text. This was a time-consuming and painstaking exercise (Gibbs 2009). However, this conversion exercise allowed the researcher to engage much more with the data and be familiarised with the key themes in the collected data (Bryman 2016; Saunders et al. 2016; Gibbs 2009).

Another method of data transcription is employing software such as CAQDAS via NVivo 11. The researcher avoided utilising this software to prevent the criticism Fielding and Lee (1988) raised against CAQDAS. These scholars argue that the use of CAQDAS creates a familiarisation gap between the collected data and the researcher, leading to error in the data analysis. Hence, manual transcription (word for word) was undertaken. This transcribed word was "cleaned up" and organised using Microsoft word document in a format acceptable to CAQDAS NVivo 11 because of the benefit of this software, its efficiency and transparency (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016).

Prior to undertaking the data collection (fieldwork), the researcher attended NVivo 11 training (NVivo 11 Training – Thorough Introduction) organised by the Research Training Coordinator of the graduate school of Robert Gordon University on January 9, 2018. The researcher also attended the three (3) day Scottish Graduate School of Social Science workshop (SGSSS Summer School) in June 2019). The SGSSS Summer School captured taught session such as NVivo 11 – Introduction, Hands-on Qualitative Methods – Going from Data to Analysis Using NVivo 11, Qualitative Analysis – Analysing Interview Interaction Using NVivo 11. The engagement with this SGSSS Summer School enhanced the researcher proficiency in knowledge and application of NVivo 11.

The researcher deployed CAQDAS via NVivo 11 being a readily available data management software in RGU to guide and facilitate data management in this research study. CAQDAS via NVivo 11 is a robust data management software with the capacity to efficiently gather data, transparent data management, and helpful in the coding process of data analysis (Creswell and Poth 2017). In addition, the interpretation in the data analysis process was undertaken by the researcher (Marshall and Rossman 2015) to complement the benefits of CAQDAS in the study.

The researcher also employed ear speakers in the process of the data conversion process to manage noise and distortion of information. This was also done in consideration of the presence of other PhD researchers in the ABS research Hub that jointly shares the office space.

The conversion process was complemented with extracts from the note-taking exercise in the researcher's diary during data collection sessions. This observed and written non-verbal behaviour could not have been recorded with the tape recorder. Non-consideration of these non-verbal behaviours brings a lack of wholesomeness to the data collection process (Gibbs 2009). The researcher ensured that body language, facial expressions, emotions, and gestures that connote meanings were not excluded from the data analysis process. The researcher experienced some English language pronunciation challenges in the process of data transcription. This pronunciation challenge was mitigated by ensuring that the transcript properly "cleaned up" grammatical errors by inputting in square bracket [].

For instance:

> "*… Yes, we need the reform in the industry bill to allow us to adopt new models that [are] commercial[ly] driven"*. (NNPCPART09).

Extracts from this note-taking exercise were considered and subsequently transferred into the Computer-Aided Qualitative Data Analysis System (CAQDAS) via NVivo 11.

Having transcribed and imported the "cleaned data" into CAQDAS via NVivo 11, the next section presents the second (data coding) data analysis step as scholarly suggested (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009).

5.15.2 Data coding

This is the second step of the data analysis that the researcher undertook after the data transcription phase of the study. Coding refers to a grouping of information in small chunks of text (Gibbs 2009). Coding is thematic analysis-driven and thematic data coding involves making sense of the text data or image data collected from interviews, observation, and documents aimed at revealing meaningful interpretation of the event under study (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). The researcher adopted the thematic coding method.

The thematic coding method aligns with the epistemological interpretive philosophical stance adopted in this study. The adoption of a thematic coding approach treats evidence from data fairly, eliminates alternative interpretations, and produces a credible submission (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). The employed thematic coding method identified relevant concepts and categories. This identification was achieved by a process of consistent comparison within a data text. The essence is to allow the researcher to comprehensively understand the research respondent's view regarding the impact of environmental forces on the corporation, perception on strategic issues, and growth strategies.

These scholars further point out that thematic coding entails assembling the text data or image data into small categories of information, searching evidence for the code from an array of database being utilised for the study, and then ascribing a label to the code. It is important to note that not all the information captured in the database is used in a qualitative study (Yin 2018). This is because, some of this information is not relevant to the study, and accordingly, discarded or utilised for other research purposes (Gibbs 2009).

According to (Gibbs 2009), there are three approaches to coding in a qualitative research. These approaches are "creating new code", "employing existing code", and lastly, "developing new codes from the transcript".

The "creating new code approach" is based on preconceived expectations about data. This implies that codes are not directly generated from the collected data, instead, inferences are made without referring to the data in the transcript. The "creating new code approach" is employed when an existing theory guides the researcher, so the constructs of the existing theory guide code creation. However, this is not a deductive study, rather an inductive research study. This "creating new code" approach is not applicable in this study because no existing theory guides this study. This exploratory study aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

In the "employing existing code" approach, the researcher designs several codes and maps identified content in the data that fits perfectly into these existing designed codes. However, this coding approach is considered inappropriate for this study. This is because the "employing existing code" approach confines the researcher to preconceived ideas that limit the ability of the researcher to explore the collected data in its entirety (breadth and depth) due to the existing designed codes (Bazeley and Jackson 2013; Gibbs 2009).

The last approach of data coding as scholarly observed is the "developing new codes from the transcript" approach (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Bazeley and Jackson 2013; Gibbs 2009). According to these scholars, this approach entails the researcher conducting a thorough read-through of the text data or image data to identify the codes and themes obtained from interviews, observation, and documents that reveal the meaningful interpretation of the event under study. This "developing new codes from the transcript" approach aligns with the inductive approach of this study. This "developing new codes from the transcript" approach permit flexibility and allows changes as thoughts emerge from the iterative engagement with the transcript. "Developing new codes from the transcript" approach is not underpinned by any existing theory. This implies that the researcher can comprehensively explore several ideas that are identified in the interview, observation, and documents. The identified ideas were coded and developed into themes and the relationship explored (Marshall and Rossman 2015; Bazeley and Jackson 2013; Gibbs 2009).

In this study, the researcher began by manually developing elaborate lists of codes, having reviewed the transcript repeatedly to showcase patterns, categories, and emerging theories. The manual coding at this first coding stage aids the research to engage and interact more with the entire transcript (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). This was followed by identifying and marking sequences of text by coding before the eventual importation into NVivo 11 by the researcher to develop a more structured hierarchical code list as suggested by Bazeley and Jackson (2013).

Although NVivo 11 has auto coding features, the researcher systematically generated the codes through a thorough and meticulous engagement with the transcript. However, the researcher utilised NVivo 11 to effectively organise the data in a simple, concise, reliable pattern to achieve transparency in the data analysis process (Bazeley and Jackson 2013; Gibbs 2009).

Having achieved the structured hierarchical code lists, the researcher sorted the identified codes into multiple themes. These multiple themes were further combined to develop overarching individual themes or common themes. Each of these individual themes began to make sense to the researcher, and the data's "sense-making" attributes confirmed the richness (depth and breadth) of the data collected for this study. This was followed by further refinement and verification of the individual themes to ensure that all meaningful themes were captured, thus, guaranteeing and revealing the richness of data in relation to the phenomena under study (NNPC, Nigeria).

The next section presents the last step involved in the analysis of data in this study.

5.15.3 Data Analysis

In this last step of the data analysis method, the study employed thematic analysis. Thematic analysis is mostly qualitative research-driven and focuses on identifying common themes, analysing, and interpreting patterns of meaning within collected qualitative data (Creswell and Poth 2018; Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). These scholars observe that thematic analysis entails reading and studying text data as transcript, or image data as in photographs that lead to the development of theories (inductively) and validation existing theory or theories (deductively). This implies that thematic analysis provides the researcher with a rich account of the event or phenomena under study.

To provide a rich account of the data collected, the researcher ensured that themes identified from the data are coded and analysed to represent an accurate account of the data collected. The researcher read and studied data with constant iteration with the whole data collected. This is to enable the researcher to have a comprehensive understanding of the breadth and depth of the collected data (Yin 2018; Bryman 2016; Saunders et al. 2016; Gibbs 2009). The constant iteration and familiarisation with the whole data led to the identification of dominant themes, patterns and meaning.

All the themes were further reviewed to show a coherent pattern. To ensure validity of the individual refined and verified themes, the researcher conducted a further review of the database with the sole purpose of re-coding any additional theme(s) missed in the transcription or coding phase of the study. This final review did not identify any missing theme(s). As a result, the researcher's knowledge and understanding on strategic issues and the environmental forces influencing the strategic direction of an organisation was further enhanced.

The entire data analysis process identified some themes in the study. Some of the identified themes include government interference, regulatory framework, funding, decision making, non-fixed tenor for the GMD, board members, top management, technology, skillset gap, and communication. In addition, the researcher identified other themes and sub-themes such as joint ventures, strategic alliance, reservoir, and renewable energy strategy. Finally, relating to the criteria for the acceptance of the research recommendation, identified themes from data include objectivity in reporting and stakeholder management.

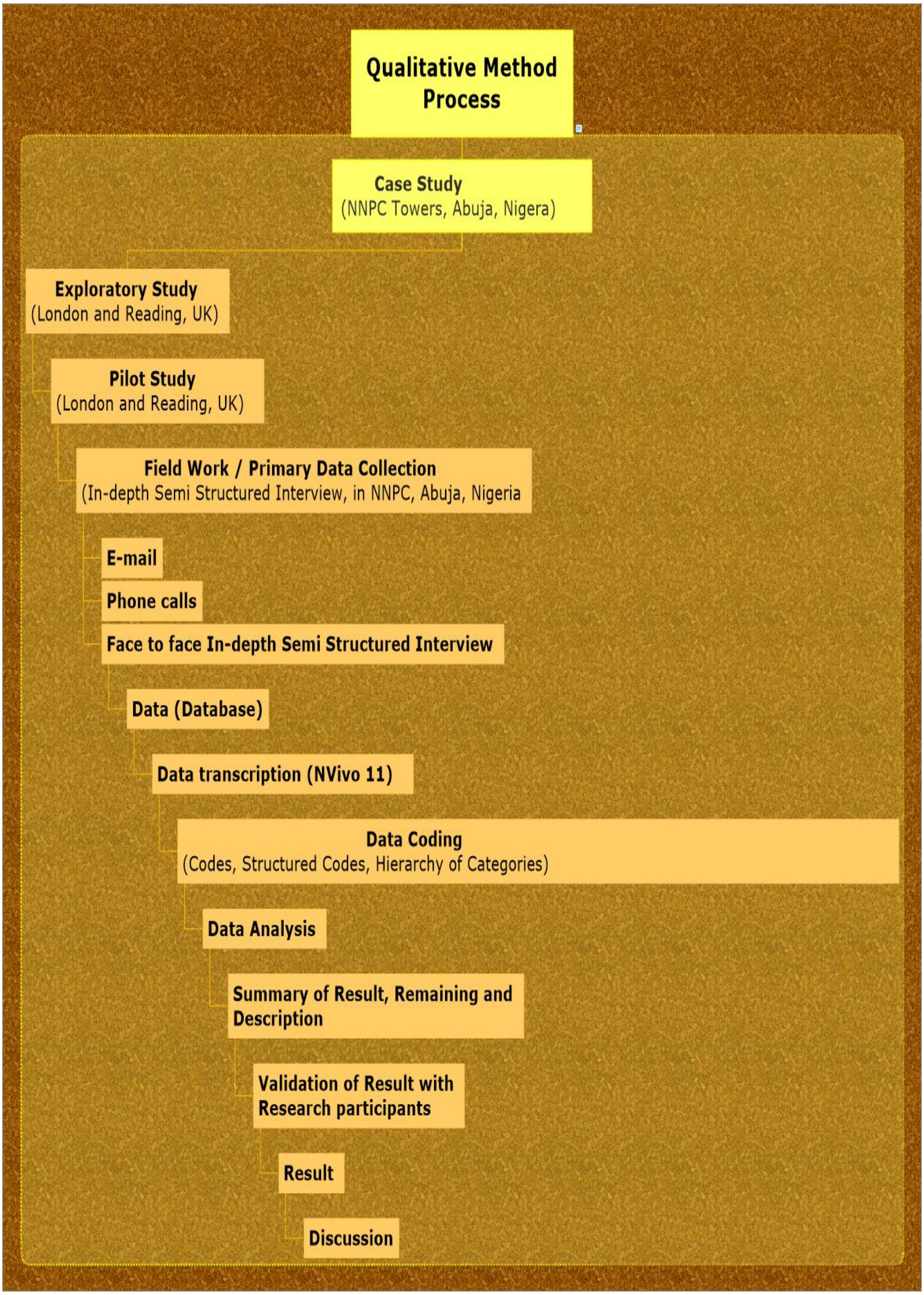
To ensure that no relevant data was missing and to confirm that the researcher participants were not quoted out of context, the researcher sent the transcript capturing the identified codes and themes to the researcher participants for validation. This validation process enhanced the credibility, transparency, and accountability in the entire process.

These identified themes were subsequently summarised, underpinned by the researcher’s ability to identify the relationship between these themes and the study’s aim.

Finally, the researcher progressed by renaming and defining these themes. This renaming and defining of the themes allowed the researcher to present a detailed storyline that captures the accurate and exact essence of the themes in the database. The purpose of presenting a detailed storyline is to provide the readership with making sense of the themes in line with the aim of the study which is critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

The next chapter presents the key findings from the analysis, which were subsequently discussed. Figure 10 below shows the sequence of the processes undertaken by the researcher in this qualitative data analysis.

Figure 9: Qualitative method flow for the study.



Source: Author generated

5.16 Conclusion

This research study adopts the interpretivist epistemological viewpoint, using qualitative methods in the critical evaluation research topic under investigation. Emergent ideas and themes from collected data were identified via the inductive approach. A case study strategy was employed to describe, explain, and evaluate NNPC's strategic issues, growth strategies, and response mechanism to the impact of environmental forces on the oil and gas industry. The study employed the qualitative method. Preliminary findings from secondary data underpinned the collection of primary data (via in-depth semi-structured face-to-face interview) to provide answers to the "why", "how", and "what" questions of this study. The transcribed data was coded into structured codes, followed by themes and hierarchical categorisation. The data was analysed thematically, the thematic analysis provides the researcher with a rich account of the phenomena under study.

The next chapter presents the results and findings of the data collection techniques employed in this study.

CHAPTER SIX

Presentation of Findings

6.0 Introduction

This chapter presents findings from the analysis of the data collected from employees of NNPC (top and mid-management), the National Assembly (NASS) committee members on oil and gas, and the customers of NNPC through semi-structured interviews. The interviews focused on exploring the participant's perception of growth strategies, strategic issues, and overall response of the NNPC' strategic drivers to environmental forces affecting the oil and gas industry. Hence, this chapter focuses on the major themes that were identified from the data analysis in relation to the study aim. Themes, sub-themes, and categories emerging from the data analysis are discussed. The perceptions of NNPC employees (top and mid-management), the NASS, and customers on the impact of environmental forces on strategic growth are presented.

The results in this study are presented using the inductive approach. The study is guided by the interpretive paradigm to understand the participants' narratives and their subjective views from their own experiences, within time and context of their respective location. The data is presented to reflect the analysis of findings and the researcher's interpretations of data on the influence of environmental forces on the NNPC growth strategy to improve profitability and sustainability.

The interview was conducted to serve two purposes:

- Understanding of environmental forces that impact on NNPC's growth strategies in the oil and gas industry.
- Understanding and evaluating how the existing strategy implemented by the NNPC stimulated profitability and in turn spurred business growth within the global energy market.

The next sections present the findings of identified issues underpinned by identified themes and sub-themes.

6.1 Environmental forces

Environmental forces are perceived as change drivers by the research participants and have the tendency to force decision-makers to review and innovate their growth strategies in response to the impact of these environmental forces. For the purpose of this study, environmental forces that impact on NNPC are categorised under two sub-themes by the researcher, that is, external environmental forces and the internal environment as discussed below and shown in Figure 10.

Figure 10: Identified Environmental Forces Impacting on NNPC

Source: Author Generated

6.1.1 External Environmental Forces

The researcher categorised the following forces as external environmental forces because the impact of these forces is external to NNPC. Accordingly, NNPC strategic drivers and managers had no control over their impact on NNPC's growth strategies. As such, NNPC had to adopt their growth strategies in a bid to conform to the mandates and stakeholders' expectations/external forces.

6.1.1.1 Government Interference

In this study, government interference emerged as the most recurring theme with 130 quotations in total, and all participants (21) commented on this theme in data analysis.

Participants demonstrated a significant role played by the government and the impact on the formulation and implementation of growth strategy in the NNPC. This is shown in Table 7 below and presented explicitly in the context of "ownership structure", "funding", "decision making in NNPC", "regulatory structure", "non-fixed tenor for the GMD, executive directors", "top and mid-management recruitment and selection".

Table 7: Excerpt on government interference

Participants	**Excerpts**
NNPCPART01	*"… Sure, government interference could be one, what we do now is to let government know the level of value they are destroying as a result of their frequent interference".*
NNPCPART11	*"… The role of government is negative as earlier mentioned".*
NNPCPART16	*"… Secondly, there's too much political interference from the presidency and political class (NASS), this doesn't help for effective policy implementation".*

1. Government ownership

The FGN manage the NNPC. The government execute this management role through ownership, control, and involvement in organisational structure. This is evident in the participants' discussions surrounding the relationship between government ownership and its influence on growth strategies in the NNPC. NNPCPART02 believes that the involvement of the government in managing the NNPC has contributed to the inability of the corporation to adopt the updated mode of operations like its contemporaries:

"… *The only difference between the NNPC and other IOCs or NOCs is the ownership structure, which of course influences a little bit of tilt from how others operate".* (NNPCPART02).

The notion of government ownership contribute negatively to the development of the corporation is further supported with relevant quotes from other participants as shown in Table 8 below:

Table 8: Excerpts on Government Ownership

Participant	**Excerpts**
NNPCPART06	*"… NNPC is state-owned, and the impact of government in our operations is not so favourable".*
NNPCPART11	*"… The government has the greatest negative impact because of its involvement in our management. The government owns it".*
NNPCPART13	*"… NNPC is directly owned and indirectly managed by the government via appointment, this has become a major obstacle".*

From the excerpts above, it is evident that the government owns the NNPC and gets involved in running and managing the organisation, and the participants believe that this serves as an obstacle. Thus, government interference was perceived to be a product of government ownership.

2. Funding

Funding is the second most discussed theme, with 120 quotations in the study. In this study, funding was a major force that hamper growth strategy. This is because financial resource is a critical component that the organisation leverages on to anticipate, prepare for, respond, and adapt to incremental, and abrupt disruptions for survival and business viability.

Firstly, according to the participants, the issue of funding is significant as the government controls the revenue generated by the NNPC through the federation account, as a result increasing government autonomy. This resonates with the common problem of failing to invest in a cash cow to ensure that it continues to supply good quantities of "milk". NNPCPART08 reports this in the quote below:

> *"… Revenue generated from NNPC goes to the federation account. Thus, the government starves NNPC of its oil proceeds for strategic growth and business expansion".* (NNPCPART08).

NNPCPART14, further reasserts the control of NNPC's funds by the government:

> *"…The government controls NNPC funds from sales proceeds". Government interference in NNPC is a major issue. After all, it causes the funding challenge of NNPC because it also controls the revenue from NNPC".* (NNPCPART07).

NNPCPART07 reported funding creates strategic alliance for competitiveness, and the control of finance by the government was perceived as a disadvantage to gaining competitive edge which is an important growth strategy:

> *"… We have earlier mentioned some of these perceived challenges, this includes funding challenges, revenue generated from NNPC goes to the federation account. Thus, the government starves NNPC of its oil proceeds for strategic growth and business expansion".* (NNPCPART07).

Other participants reaffirm that funding is perceived as a challenge to deploying growth strategies Table 9:

Table 9: Excerpt on Funding

Participants	**Excerpts**
NNPCPART01	"*... There should be, funding could be a major reason*".
NNPCPART03	*"… funding is a challenge"*
NNPCPART04	*"… Return on investment amongst others".*
NNPCPART11	*"… Yes, NNPC is challenged with funding"*

NNPCPART07, was observed to hold a different notion, thereby expressing concerns about the seeming negligence of funding in the process of strategy formulation as a result of NNPC's "over" reliance and dependence on the IOC's to formulate strategies:

> *"… The major players are still the major international oil companies, but there is this new idea that the new kings of oil are no longer the international oil companies but the national oil companies. Still, they are second only and arguably may be more powerful than the IOCs because they have the government fully behind them. So, finance is not a big issue for them".* (NNPCPART07).

The quote above, it shows that the funding available to the IOCs gives them autonomy and contributes to NOCs tendency to look up to them for strategy formulation cues. This corroborates with the literature, which shows that finance is an issue for the dependence of some NOCs on IOCs.

3. Decision-Making

In the context of this study, decision-making refers to choices relating to organisational resource capabilities amid threats and opportunities.

For NNPCPART09, government ownership was a significant reason for the non-existence of international strategy and the delay in decision-making. This also serves as an obstacle to the formulation and implementation of growth strategy as the mentioned actions involve decision-making:

> "… *The impact of government in our operations is not so favourable. It inhibits us from going international, delays our decision-making process".* (NNPCPART09).

The delay in decision-making is also evident in the non-passage of the Petroleum Industry Bill which has slowed the formulation and implementation of some processes in the NNPC:

> *"…Yes, we are looking at alliances, joint ventures with international view when the Petroleum Industry Bill is passed". (*NNPCPART01).

In addition, the NNPC management believed that the inefficiency of the corporation in its relationship with its customers, leading to the negative perceptions about the corporation's mode of operation by customers is a result of government ownership. This assumption is reinforced by participants (NNPCPART09 and NNPCPART13):

*"… NNPC for some time now has been under-performing because of the government interference". (*NNPCPART09*).*

*"… The government also slows our operations management process". (*NNPCPART13*).*

4. Non-fixed tenure of the GMD, board, and top management

According to most of the interviewees, the NNPC is routinely faced with the uncertainty of leadership role, the board (NASS) and top management. This is because these roles are more often occupied through government appointment. The interviewees argue that this practice has not made provision for continuity in the formulation and implementation of strategies, as more than five Group Managing Directors have sphere headed the affairs of the NNPC in less than ten (10) years. This concern is represented in a quote by participant 9:

"… *For me, obstacle one is our GMD tenure is not fixed, from 2011 till date, NNPC has had like five (5) to six (6) GMD, almost on a yearly thing. Thus, there is no continuation in policy and implementation, that is a big obstacle*". (NNPCPART09).

Participant 1 and 11 further assert the existence of uncertainty in the leadership as an obstacle to the formulation and implementation of growth strategy in the NNPC:

"… We have all manner of succession plans; the leaders are not even sure of their tenure". (NNPCPART01).

"… *Lack of leadership and clear succession plan are obstacles too. Political interference is also another obstacle".* (NNPCPART11).

In addition, two of the participants reported that even when strategy is successfully formulated and implemented, there was tendency for it to be changed or discontinued due to inconsistent ideologies emanating from frequent change in leadership. Participant 2 and 8 assert this notion in the quotes below:

"… *Policy summersault due to incessant management changes. We are owned by the government, and the politicians come in and go. Each politician that comes becomes the head of the corporation and each and every one that comes with their different agendas and their own road map. This has not been quite interesting and this*

> *creates inconsistency. Because existing road map are not followed like what happens in the IOCs".* (Participant 2).
>
> "… *So, when new management comes in, they want to see how their management style can improve on these various aspects that I have just mentioned. So, they inform strategy formulation with the intention of improving on the company's bottom line and we just need planning to work in that perspective*". (Participant 8).

5. Regulatory framework

The current regulatory framework is another key force that has a negative impact on NNPC growth strategy. This is the regulatory framework that enacts the NNPC (NNPC Act 1977). The NNPC Act of 1977 states that only the FGN can grant and manage licencing and production rights, exploration and production process, oil and gas governance and compliance for other companies and other governments.

An interesting finding from data analysis revealed that government regulation in the form of the NNPC Act 1977 places restrictions on NNPCs international strategy and serves as an obstacle to the formulation and implementation of international strategies as vocalised by NNPCPART07, a member of top management:

> "… *In NNPC, we operate organic strategy, we intend to grow from within because of the government ownership and regulation, interferences and other limiting clauses captured in the NNPC Act. This limits us from growing inorganically within the various sector of NNPC". (*NNPCPART07).

Some participants argued that the NNPC Act 1977 and the non-passage of the Petroleum Bill placed a barrier to the sustainable growth of the corporation by limiting its operations. NNPCPART07 and NNPCPART10 raised this issue:

> "… *No strategies for growth. Rather the Legal framework, government policy, the NNPC act of 1977, the National Assembly has not given the corporation the powers to go international*". (NNPCPART07).

"… Yes, we need the reform in the industry bill to allow us to adopt new models". (NNPCPART10).

This position is further supported by another research participant, who states that the organic growth strategy adopted by the NNPC as a result of the NNPC Act 1977 also restricts the formulation and implementation of international strategy:

"… *In NNPC, we grow from within. We grow organically because of the NNPC Act of 1977".* (NNPCPART16).

In contrast, NNPCPART06 perceived the absence of international strategy as a form of business incompetence resulting from the inability of the corporation to establish an international strategy business unit (SBU), rather than the existing business growth strategy guided by the legal framework, this belief is reported in the quote below:

"… We're asking ourselves do we have SBUs in the international environment. We don't have [these] as we speak today". (NNPCPART06).

6. Technology

All through the process of data analysis, the participants acknowledged the importance of technology in running a successful oil and gas industry. But despite this awareness, the participants suggested a deficiency in the use of technology in the NNPC to achieve competitive advantage, as most projects requiring the use of technology are only executed in partnership with other NOCs or IOCs and abandoned in partnership situations where suitable collaboration could not be established. This is supported by NNPCPART07 in two relevant quotes, who notes that:

"… NNPC has talented personnel but because of the dynamic nature of technology and the dynamics in the oil and gas environment, technology becomes obsolete quite fast. Thus, we are always looking for an opportunity to partner with entities that have this modern technology to meet the changing trend since the intention is to be growing and not lag. Yes, we have but not all the capability,

so, where we don't have a skill, we always go in partnership to help". (NNPCPART07).

In addition, the partnership was analysed to evaluate the existence of a skill gap in technology. This is evident in the participant excerpts as one of the two major reasons for partnership by the NNPC was narrowed to the need for technology which is not cost effective.

One of the participants emphasises this concern:

"… *NNPC manages the holistic process from the exploration, production, refining, and gas development in Nigeria through profit-sharing contract with IOCs, we do this to breach the skill gap in the upstream and downstream, although this is not so cost-effective."*(NNPCPART05).

Another participant also expressed this concern about cost:

"… *the profit margin in NNPC is insignificant due to production sharing contracts".* (NNPCPART14).

Other participants reaffirmed this concern in Table 10 below.

Table 10: Excerpts concerning partnership to breach technological skill-gap.

Participant	**Excerpts**
NNPCPART06	"… *Sometimes, we use JVs, partnership, and alliance".*
NNPCPART07.	*"… We may not have all the technical skills resident with us here, nevertheless, no matter how talented NNPC is, there are still some areas that you may need to partner with other because of the dynamic nature of technology and the dynamic oil and gas environment".*
NNPCPART09	"… *In choosing partnership, we try to find partners who have the technology we don't have".*
NNPCPART10	*"… Limited skill on off-shore activities because of minimal participation, most of the activities are done by the IOCs".*
NNPCPART14	*"… IOCs are well resourceful, and they deploy state of the art technology exploration and produce oil and gas".*

From the quotations above, it was noted that the NNPC's networking involves monetary exchange through profit-sharing rather than skill acquisition and sharing of new technology for sustainable growth, which is supposed to be the main purpose for networking.

Another significant finding revealed is that the NNPC relies solely on partnership to perform its major operational activities of exploration and production in the upstream. This also serves as an obstacle in formulation and implementation of strategy as it can be interpreted to mean that the corporations' profit is majorly used to pay off partners rather than used for the purpose of growth. This is vocalised by NNPCPART01:

> *"… We have joint venture arrangements in production with Y, Z and X oil, hence we invest in the upstream sector to increase our output in production at a cost, more like profit-sharing".* (NNPCPART01).

The poor utilisation of technology by the NNPC was also an issue of concern. This concern was raised by the corporation's customers, as the customers reported the long waiting times leading to profit losses in their businesses and encouraging customers preference of doing business with other NOCs but the NNPC, thus posing a threat to the NNPCs competitive edge over its contemporaries. This ordeal is represented in Table 11 below.

Table 11: Excerpts concerning NNPCs optimisation of technology by Customers.

Participants	**Excerpts**
NNPCPART18	*"… NNPC should borrow a leaf from DPR by going digital and embracing it."*
NNPCPART19	*"… Technology is significant in the oil and gas industry. I wonder if NNPC management is aware of the importance of technology in this present world-order".*
NNPCPART20	*"… The impact of technological innovation is huge; however, technology is driven by humans that are guided by leadership".*
NNPCPART21.	*"… The impact of technology in our relationship with NNPC minimal and embarrassing, comparing it with*

	other NOCs such as Saudi Aramco, Statoil, Petrobras etc. NNPC needs an overhaul in the technology space."

7. Commercial and Non-commercial objectives

NNPC commercial and non-commercial objectives was stated as an external environmental force impacting on NNPC growth strategy. This is termed as an external environmental force because of government ownership and control rights over NNPC. Accordingly, vesting the power to determine the commercial and non-commercial objectives at the establishment of the corporation on the government. However, commercial, and non-commercial objectives pose a significant challenge for policy and decision-makers in NOCs, mainly because of the diverse stakeholder interests.

According to some participants, the NNPC encounters the persistent task of balancing commercial and non-commercial objectives, such as profit maximisation and national socio-economic growth. Participants 1 and 9 in support of the above idea alluded that alliances, joint ventures and international trading would be better with the passage of the PIB. Accordingly, the attainment of commercial and non-commercial objectives of NNPC.

> *"… And with the commercialisation fever going on, with government trying to pass the PIB or the PIGB. We are sure that things could go right, when this bill is passed".* (NNPCPART01).

> *"… Yes, we need the reform in the industry bill to allow us to adopt new models that [are] commercial[ly] driven"*. (NNPCPART09).

These concerns are represented in Table 12 below.

Table 12: Excerpts concerning NNPC's objectives.

Participants	**Excerpts**

NNPCPART09	*"… You know the national oil company, an integrated national company and since then the policies and strategy and the policy of NNPC are not different from government policy."*
NNPCPART13	*"… High as broad strategy formulation & implementation usually draws from the policy direction of government such as the Economic Recovery & Growth Plan (ERGP)".*

8. Global Price

The experience in the last decade of the recurring low price of oil and gas and increase in the cost of exploration and production have caused NOCs and IOCs to rethink strategies and make provision for other alternatives as a risk management precaution. Thus, the participants in this study were asked about the risk mitigating process adopted by the NNPC in response to uncertainties threatening the industry. The analysis of participant responses revealed blurry ideas, dependence on personnel experience to provide alternatives to strategy, cost efficient and collective brainstorming workshops by top management and subsidiaries. These ideas are represented in Table 13 below.

Table 13: Excerpts on response to Global Oil Price

Participants	**Excerpts**
NNPCPART02	*"… We are looking at the quick wins, the low hanging foods and again what will give the maximum value to our stakeholders at a very minimal cost yet provide maximum value".*
NNPCPART17	*"… By using risk assessments, probabilities outcomes, NPV, Payback period and ROI. The strategy with the best or optimal outcome is selected".*

Based on the above quotes, there is again no clear path to tackling future global price issues arising in the complex and dynamic oil and gas industry.

9. Safety and Security

Even though there was consensus concerning the factors influencing growth strategy, some of the interviewees had other opinions concerning the subject matter. NNPCPART08 mentioned safety and security to be a force impacting NNPC's growth strategy as host communities have been involved in the destruction of NNPCs facilities leading to loss.

> "… *The security and safety of our facilities plays a role in strategy formulation, to reduce vandalism, although this has reduced because the corporation has engaged more with the host communities of our facilities, which was also an implemented strategy".* (NNPCPART08).

Based on participant narratives, the feeling of insecurity is one of the major external environmental forces against growth strategy, as this insecurity keeps recurring and manifesting in the form of hostility from host communities to the kidnappings of expatriates.

NNPCPART16 points out this issue:

> *"… Security, I know you must have heard that the Niger Delta area, where the oil is mined, experiences security challenges".* (NNPCPART16).

NNPCPART13 in support of the above notion added that pipeline vandalisation due to unrest in the host communities have also contributed to economic setbacks for the corporation as they have to be replaced afterwards by the corporation, and this is capital intensive:

> "… *After succeeding in your strategy, lay your pipelines, waiting to recoup the benefit of your investment and then suddenly some environmental issues come about, communal issues erupts and before you know it all your pipelines are set on fire causing you set back".* (NNPCPART13).

Insecurity as an environmental forcer discourages investment in the NNPC by creating a climate of fear in the minds of the investors concerning the uncertainties involved in the business. This uncertainty concerning environmental force in the form of the safety and security impact on NNPC's growth strategy as there is no assurance regarding future partnerships and foreign investment and affects profitability as reported by NNPCPART07:

> "… *And these factors have their downsides, because if the environment of business has a lot of turmoil, where expatriates are kidnapped here and there, that will impact negatively on the foreign direct investment, it makes it difficult to get partners willing to bring in their resources".* (NNPCPART07).

NNPCPART05 further reaffirms the above quote:

> "… *Thirdly, our environment is very peculiar, and community interference is high in our operation, community interference is high and unpredictable. So, our asset is not protected. Just like the activity of militancy, though relatively peaceful today but unpredictable tomorrow. All these hampers on effective policy initiation and implementation. The host community is a salient factor also".* (NNPCPART05).

The context of insecurity is further represented in Table 14 below:

Table 14: Excerpts on insecurity as a challenge to growth strategies

Participant	**Excerpts**
NNPCPART14	*"… Economic instability, regional security".*
NNPCPART07	*"… We talked the challenge of security, we talk about the environment, these are the key challenges oil producing community expectations".*
NNPCPART13	*"… Oil producing community expectations".*
NNPCPART14	*"… Environment, host community constraints, risk and mitigants, government regulations etc".*

From the following interviews, it can be deduced that these identified themes impact significantly on NNPC's growth strategy and profitability. Nonetheless, the interviewees also mentioned other forces which the researcher categorises as internal environmental forces.

Section 6.1.1 identified and discussed external environmental forces that impact to NNPC's growth strategy and profitability. Evidence suggests that the strategic drivers and managers of NNPC have no control over these forces. Accordingly, NNPC's GMD, board members, and top management of NNPC must adopt their growth strategies in a bid to conform to the mandates and stakeholders' expectations.

Notable amongst these forces include government ownership, funding, decision-making, non-fixed tenure of the GMD, board members, and top management of NNPC, regulatory framework, technology, commercial and non-commercial objectives, global price, and safety and security. Underpinned by the identification and discussion of these external forces, the next section will focus on the internal forces that the strategic drivers and managers of NNPC have control over.

6.1.2. Internal environmental forces

The researcher classified the following forces as internal environmental forces that impact on NNPC's growth strategies.

6.1.2. 1. Skill Set Gap

A theme that emerged from data analysis is the skill set gap. The skill set gap is a key internal environmental force with participant citations 110 times in this study.

Data analysis in this study revealed that the NNPC has not recruited in a decade.

NNPCPART14 stated that no recruitment was made in the last ten years. This is clearly stated in his quote:

> "… *NNPC has not done the recruitment process in the last ten years, NNPC uses its human resources department and outsourcing companies in the recruitment process".* (NNPCPART14).

This response was similar to that of other participants that point out the dormant nature of the recruitment and selection process in the corporation as shown in Table 15.

Table 15: Excerpts on a decade without recruitment.

Participants	Excerpts
NNPCPART07	"… *There has been no official recruitment in the past ten years."*
NNPCPART12	*"… However, NNPC has not done recruitment in the last ten years but when this is done through a very competitive process".*

On the contrary, while top management reported that recruitment was based on "competency", "quota system", and "government appointment", the participants in the mid-management strongly believed the government controls the recruitment and selection as unofficial recruitment and selection is seen to take place:

Participant 11 echoed this stance.

> *"… NNPC has not done the recruitment process in the last ten years, nevertheless, we see new employees' year-in, year-out".* (NNPCPART11).

1. **Competency**

Although the members of NNPC top management corroborate that there has been no recruitment in the past ten years, they were observed to state competency as the critical factor influencing the recruitment and selection process, and lastly the quota system.

NNPCPART02 explicitly explains the supposed recruitment process:

> *"… Objectively, we publish in National newspapers, we set out the criteria, people are selected on merit, and it is transparent, we call*

Federal Character commission to review our shortlisting". (NNPCPART02).

Table 16 shows interviewees responses asserting this:

Table 16: Excerpts on competency as recruitment criteria

Participant	**Excerpt**
NNPCPART03	*"… NNPC recruitment process is conducted nationwide, although it has not been conducted in the last ten years. The recruitment is outsourced to the likes PWC, Philip consulting, Woodmark amongst others and supposed to be based on merit".*
NNPCPART05	*"… NNPC outsource a part of their recruitment process to consultancy firms, especially at the initial stage. This consultancy firms screen the applicant and forward list to NNPC human resources unit where the process is concluded".*
NNPCPART06	*"… We have a criterion for instance, a graduate trainee, must hold a first class or second-class upper division and it must tally with the discipline that they are asking for. You must fall within those disciplines to be employed".*

From the analysis of data in table 16 uncertainty exists in the participant quotes on competency as a major criterion in the recruitment process, as they speak more in anticipation of appropriate recruitment process in blueprint, rather than the practical process of recruitment in the corporation.

2. **Quota System**

Another noted method of recruitment and selection revealed is the quota system. The quota system is a process of ensuring representation by the six geopolitical zones. Quota system is an influential factor in NNPCs recruitment process. NNPCPART01 and NNPCPART05 report this in the quotes below:

"… Our shortlisting must have geopolitical zone balancing". (NNPCPART01).

Participant 5 reaffirms this concern:

"… Federal character and quota system play a significant role in the recruitment process". (NNPCPART05).

Some of the participants clearly stated their concerns regards the quota system in the recruitment process because they believed it did not support the recruitment of competent individuals. They are left with no choice as they may have been appointed through the same process by the government. Their concerns were reinforced by NNPCPART05 who stated that:

"… *Sure, like I mentioned, the powers behind the veil can affect, a situation where those that installed you in management hide behind the veil and tell you this is what they want[s], because you are under authority you can't deny them, sometimes you need to fall for them just to buy peace. So that happens".* (NNPCPART05).

3. Government Appointment by Experience

Similarly, NNPCPART02, also states that some of the recruitment is based on government appointment because of the individual's experience in the oil and gas industry over a long period of time:

"… Then, we can also appoint, the government also appoints some higher people who have worked in oil and gas for the role of general managers and above who come with a wealth of experience". (NNPCPART02).

4. Contract

Some of the employees are also recruited based on a 1-2 years contract, and the government also influences this type of recruitment:

"… We also do some contract appointment, contract appoint by way of need and recommendation from key stakeholders, such as the government. We take them for a year or two for knowledge

> *transfer, and we dispense with them, so they go back as retirees".* (NNPCPART02).

In summary, four (4) major factors, including competence, appointment (experience), quota system, and contract, influence the recruitment process. However, the government significantly influences three (3) of these factors apart from competence.

The essence of recruitment by HR is to achieve the goal of the organisation by appointing competent individuals who will contribute to the overall growth and development of the organisation through profit-making. However, there are conflicting responses between the various levels of management that were analysed.

It is interesting to note that, while some of the participants in the top management believed that recruitment had led the organisation to profitability. This assertion takes no account of the magnitude of the profits nor are there proofs to this effect. The majority of the mid-management level participants believed that the correlation between recruitment and profitability has been negative. Participant 2 addresses the former, participant 12 addresses the latter in the quotes below:

> *"… Recruitment process is supposed to attract the best skills that will enable NNPC to meet its objectives but, as I mentioned earlier, NNPC is government-owned, the government is involved in its operations, the government is involved in the recruitment process through a quota system and even strategic selection process. I think this has not helped the organisation to some extent".* (NNPCPART02).

> "… *Yes, very well, recruitment, the policy has brought about sound minds from all the industries and globe, young intellectual through competitive test process".* (NNPCPART12).

Participants supporting recruitment influencing positive profit within the corporation vocalise their views in Table 17.

Table 17: Excerpts on Positive influence of recruitment on profitability.

Participant	**Excerpt**
(NNPCPART02)	*"… Yes; recruitment of talented, qualified and experienced professional has helped in bridging identified skill gaps needed to drive key business process and growth*".
(NNPCPART03)	*"… Yes, very well, recruitment the policy has impacted positively.*
(NNPCPART07)	*"… Yes, recruitment and selection have a significant impact if properly conducted, where it is devoid of political and government influence*".

However, some participants believed that recruitment has not impacted on organisational profit, rather it has caused losses due to reliance on partners for profit-sharing because of skill-gap. Participants vocalise their views in Table 18 below.

Table 18: Excerpts on Negative influence of recruitment on profitability.

Participant	**Excerpt**
(NNPCPART05)	*"… I think federal character and quota system is not helping the company [in] many ways because of the specialised skill set need[ed] for this sector*".
(NNPCPART10)	*"… The quota system and even strategic selection process. I think this has not helped the organisation to some extent"*.
(NNPCPART11)	"…. *Issues of the skills gap, if there is special skills gap, federal character or quota system affect recruitment process, I think NNPC is resourceful, but we need to up-skill our personnel to meet the current industry expectations".*

The interviewees perceived the skill gap which was popularly referred to as "skills set" as a significant issue not covered by the human resource team. However, these were attributed to government interference as asserted by NNPCPART07:

"… I can tell you that NNPC has the benefit of having one of the most talented human resources that any organisation can be proud of, nevertheless, no matter how talented NNPC the government owns it". (NNPCPART07).

But participant 1 had a different perspective about the factors influencing skill gap in the organisation, suggesting that training is also a factor as continuous learning is still implementation in progress:

"… *Human resource issues can be another reason. You see, there is what we call continuous improvement. So, you never arrive, you keep improving like one of the core values of NNPC will tell you professional excellence, we are working on that".* (NNPCPART01).

Further training of employees was suggested to improve the skill gap in the corporation, as emphasised by NNPCPART11:

"… Our employees need further training to meet current business demands". (NNPCPART11).

Despite government interference, NNPCPART01 and (NNPCPART02 mentioned the use of learning and development as a strategy used to narrow this skill-gap. NNPCPART01 stated:

"… *We are always training our staff and developing them, for instance right now we have a committee called the culture orientation committee, which will be launched soon to ensure that we carry out our core value[s], operationalise them because sometimes people take them on the face value of the book".* (NNPCPART01).

In addition to training and learning, NNPCPART02, highlights the intention of the organisation to launch a new strategy "dual career path" which will encourage employees to function as both technical and administrative staff and specialise in the long-run:

"… We recognise that there is a dichotomy between the technical staff and the administrative staff. Accordingly, we are introducing what we call the dual career path, to take care of both the technical and administrative staff, this is to ensure that we are world-class and enhance profitability" ". (NNPCPART02).

"… If you come and you want to remain as technical staff, you take the technical career part. If you are going to go in and climb through a managerial level, then you take the managerial career path". (NNPCPART01).

From the quotations above, it can be argued that the use of training skills for the growth of the organisation is yet to be fully implemented.

5. **Appointments**

NNPCPART02 believed that the service timeframe of employees depends on their mode of recruitment as government appointees were more likely to serve shorter terms, depending on the tenure of government, hence stagnating growth and reducing profitability.

"… Government appointees can also go at any time" while employees recruited based on competency serve over a long period but anybody employed through the former description I gave, usually grows until the person retires". (NNPCPART02).

Hence, it can be assumed that inconsistencies exist in the leadership pattern of the NNPC based on appointment over short intervals.

6.1.2.2. Ideology of NNPC Management

The ideology of NNPC management in the context of this study refers to a consistent set of beliefs, assumptions that NNPC strategic drivers pay attention to and communicate to their staff. For instance, how change initiatives are perceived, justified, communicated, implemented within the organisational discourse.

According to NNPCPART08, NNPC has no guidelines for strategy formulation and implementation, rather, strategies are determined by the hierarchy in the organisation, or by government:

"… *Well, I would not say I know much, from the little I know there are no real criteria; it is based on the position you occupy. If today, you become a president, you automatically begin to formulate policy for NNPC, if you become a politician in National Assembly, you begin to formulate strategies for NNPC. And within the system, if you grow and attain the position of Group managing Director or Group Executive Director, you begin to formulate policy for NNPC.*

> *There are no guidelines, rather is based on the position you occupy either in the organisation or National Assembly*". (NNPCPART08).

Two participants (NNPCPART02 and NNPCPART06) further support this assumption. They stated that the items which influence the formulation and implementation of strategy are dependent on the ideologies of the management of the NNPC at a particular period, thus corroborating the report that the NNPC has either no strategic direction or it could have a strategic direction, nevertheless, it is not efficacious in achieving the desired outcome. This report is represented in Table 19 below.

Table 19: Excerpts on Management Ideology influencing growth strategy in NNPC.

Participant	**Excerpts**
NNPCPART02	"… *We are owned by the government and the politicians come and go. Each politician comes and becomes the head of the corporation and each and every one comes with their different agendas and road map. This has not been quite interesting, and this creates inconsistency. Because existing road maps are not followed like what happens in the IOCs".*
Participant 6	"… *So, when new management comes in, they want to see how their management style can improve on these various aspects that I have just mentioned. So, they inform strategy formulation with the intention of improving on the company's bottom line… and we just need planning to work in that perspective*".

6.1.2.3. Communication

All the participants established that the directorate executes the decision-making and implementation process in the NNPC. The process takes the top-down approach. This is shown in the quote by NNPCPART03:

> "… *The implementation of strategies in NNPC is basically through the directorate, it is like a top-down directive. It starts from CEO, the Chief Executive Officer of NNPC who is like the Group Managing Director to other categories of staff through the directorate and subsidiaries*". (NNPCPART03).

Other quotes by participants at all levels of management including NASS supporting the top-down implementation process of strategy by the directorate, is represented in table 20 below.

Table 20: Excerpts on Top-down decision-making process.

Participants	**Excerpt**
NNPCPART01.	*"… What happens is that all the directorate for instance, all directorates we have are all given some mandate, they are all given commitments and told what to do to ensure that what we set out to do is achieved"*.
NNPCPART03.	*"… The implementation of strategies in NNPC is basically through the directorate, it is like a top- down directive. It starts from CEO, the Chief Executive Officer of NNPC who is like the Group Managing Director to other categories of staff through the directorate and subsidiaries".*

Most of the participants were observed to be indifferent about this pattern of communication. NNPCPART07 expressed dissatisfaction, by explaining that the process limits the creativity and undesirable alternatives that can be suitable for strategic growth. This is because the bureaucratic nature of the organisation may suppress such ideas before it gets to the appropriate power:

> *"… Nevertheless, our challenge is not just funding because the bureaucratic nature of approval process of the government, thus making project implementation a difficult task".* (NNPCPART07).

Similarly, NNPCPART10 noted that information within the organisation is disseminated via a similar process (top-down):

> "… *In this whole process as you know NNPC has about eleven subsidiaries and because of that all of them are headed by managing directors, so the Group Managing Director gives instructions in the form of a policy framework to the strategic business units called the SBUs, and the implementation continues from there".* (NNPCPART10).

This notion is also supported by NNPCPART16, a member of NASS committee:

> *"… These strategies are maintained and monitored by setting production targets and comparing daily production numbers of oil and gas, water and gas injections. These numbers are reported to the executive management".* (NNPCPART16).

In summary the top-down approach was analysed to be the method adopted for communication and decision making in the NNPC, thus guiding the strategy implementation process. Hence, the corporate strategy division team and SBUs with instructions from the directorates to implement these strategies through close monitoring with significance given to time in the process of implementation.

From the extract of the interview, it can also be inferred that communication as an internal environmental force significantly impact on the growth strategies of NNPC. There is need to institute a comprehensive communication model. This model should align with NNPC strategic drivers, managers, and employees to positively mitigate the impact of lack or disinformation on NNPC that operate in this VUCA environment (Volatility, Uncertainty, Complexity, and Ambiguity), related issues and the lack of process to deal with these matters.

Section 6.1.2. identified and discussed controllable internal forces that impact on NNPC's growth strategy and profitability. Key amongst these forces are skill set gap, ideology of NNPC and communication.

In conclusion, section 6.1.1 and 6.1.2 identified environmental forces influencing NNPC's growth and profitability, the following section presents identified strategies in response to these environmental forces with the aim of spurring business profitability and growth within the global energy market by NNPC's top and mid management employees.

6.2 Existing growth strategies in the NNPC

Growth strategies are broadly grouped into Organic and inorganic growth strategies. The next section discussed this identified growth strategies in the context of the study.

6.2.1 Organic Growth Strategies

The growth strategy adopted by the NNPC in response to the impact of these identified environmental forces is organic, which is growth within the organisation. NNPCPART6 states:

> *"… NNPC is organically driven through the NNPC's twelve core business focus areas, namely; security, new business development, JV Cash-calls, production and reserve growth, NPDC growth, refinery upgrade and expansion, renewable energy and frontier exploration, oil and gas infrastructure, venture and common services, professionalism and accountability and finally, NNPC staff welfare".* (NNPCPART6).

NNPCPART05 and NNPCPART10 support the organic growth strategy adopted by the NNPC. NNPCPART05 states:

> *"… Yes, the existing growth strategies in NNPC include revenue strategies, production strategies, marketing, and expansion strategies, all these strategies are organic driven"*. (NNPCPART05).

The above excerpt reveals that the decision of the NNPC to grow organically is because of government regulation which encourages internal growth.

The growth strategy adopted by the NNPC is organic, which is growth within the organisation. NNPCPART10 establish this:

> *"… Organic growth strategy is adopted: Yes, there are strategies and because you are not an employee of NNPC, need to give you an overview. NNPC was formed in 1977 and by an act of government which encourages growth from within".* (NNPCPART10).

On the similar note, some of the interviewees further explain that recent effort is the form of "JV Cash-calls" introduced by the NNPC as an important path towards achieving growth and profitability by organisation:

6.2.2. Joint Venture Cash-calls

Profit-making is essential in any business for sustainable growth. These interviewees believed this was the case with NNPC, thus explaining that the recent effort made by the NNPC in calling off Joint Venture Cash-calls is an important step to stabilise the finance of the corporation. This belief is reflected in relevant quotes by participants in table 21 below.

Table 21: Excerpts concerning calling off JV Cash-Calls

Participants	Excerpts
NNPCPART01	*"… So, our strategy is to ensure we are no longer operating JV Cash-Calls, if we can do that, we should have a better competitive standout and offer efficient services from the IOCs".*
NNPCPART07	*"… Well, for the funding, I think, one major strategy NNPC recently put in place to solve the problem of funding is to exit the cash-call option".*

According to the NNPCPART07, Cash- calls mainly entailed the equity split of the cost of a project or production between the NNPC and its partners through joint ventures within the ratio of 60:40. However, the NNPC found fulfilling its part of such agreement difficult. This is elaborated in the quote below:

"… What I mean by cash-call is the operating system in partnership, where NNPC use to have the equity split of maybe 60 per cent for NNPC and 40 per cent for the partner. But because funding has always been a constraint, you discover that NNPC has difficulty meeting its 60 per cent financially obligation promptly and regularly. This can affect growth and operations. You know, but, recently NNPC is trying to exit these cash call obligations, so that the JVs will now be self-funded through international market loans and give NNPC/government the dividends of the project". (NNPCPART07).

Findings reveal that this is a new growth strategy adopted by the corporation. Extract from the analysis shows that the participants believed it is a positive strategy likely to sustain growth within the organisation.

6.2.3 Joint Ventures

Joint ventures in the form of networking was one major growth strategy adopted by the NNPC through partnership with NOCs and IOCs and profit sharing with these entities. Partnership and profit-sharing strategy were maintained as an alternative to the breach skill gap in technology and inadequate funding to execute certain projects by the NNPC. These strategies provide funding on certain projects with attendant profit making for the corporation as highlighted by some participants:

> "... *We rely on partners for technology".* (NNPCPART02).

> "… *If you lag in terms of technology it means your competitor will surpass you, so we are always looking for opportunity to partner with entities that have this modern technology"*. (NNPCPART03).

> *"… NNPC could have the resource, NNPC has the gas, the crude but we may not have the technology and capacity to do it alone. So, we are looking for somebody that will complement our deficiencies in technical aspect".* (NNPCPART07).

Two other growth strategies identified in the process of data analysis to include refinery upgrade, reservoir and renewable energy. These strategies were analysed as future growth strategies yet to be formulated nor implemented in the NNPC. Hence, they are referred to in this study as 'work in progress'.

6.2.4 Work in progress

1. Refinery upgrade

NNPCPART01 vocalise these plans:

> *"… The strategy we have is the refinery upgrade and expansion, we want to upgrade the refineries, expand them, for instance, there is this concept of coal location where we will have other refineries located very close to the existing ones to exploit the potentials to be able to be refine them in- country. So, I know, they are also talking about Modular refineries. They're all intended to grow, to expand the refinery and petrochemicals directorate".* (NNPCPART01).

This point is further supported by two other participants in the table 22 below.

Table 22: Excerpts concerning the construction of a refinery.

Participants	Excerpts
NNPCPART06	"… *Government has also done some roadshows and gotten some loans from external organisations to ensure that we are able to carry on with operations, for instance the refineries, the model being adopted is for partners to come get the refineries up and working and give us some part of the profit".*
NNPCPART07	"… *We also have strategic alliances with Joint venture partners, as you know in production for instance, we have joint venture arrangement with Shell, Chevron, with Total, AGIP, we interact with them and invest in upstream sector to increase our output and in our production"*.

It is important to note that the two occurring themes of; funding to be sourced in form of loans, and joint ventures with specific interest in investing in the upstream, which involves partnership for technology. In the excerpts above, there are plans for executing the refinery upgrade project.

The refinery upgrade will involve alliances through joint ventures and profit-sharing ventures which is described as networking by the participants. This opinion is articulated by participant 1 and established by NNPCPART07:

"… *For refineries, the model being adopted is for partners to come get the refineries up and working and give us some part of the profit, so as far as the global energy market is concerned we are beginning to move offshore, we are beginning to look at areas we can invest outside of Nigeria. We have some bilateral agreements with countries like Brazil and Malaysia".* (NNPCPART01).

"… Furthermore, there's is a refinery initiative that is taking place between Nigeria and Niger Republic and I think that is being cited in the northern part of the country, I had its about 150,000-barrel refining capacity per day. NNPC grows from within, that is organically". (NNPCPART07).

The participants as represented in the quote below by participant 11 believe that exiting growth strategies in the corporation are formulated as a result of previous failures resulting from benchmarking with other NOCS, however the new strategies are formulated to improve performance:

"… *The underperformance of the entity gave rise to existing growth strategies as a result of benchmarking with other NOCs also contributed".* (NNPCPART11).

However, Participant 1 supported the belief that the last three strategies are indeed work in progress, alluding that the strategies would be adopted subject to the approval of the PIB:

"… Yes, we are looking at alliances, joint ventures with international view when the Petroleum Industry Bill is passed". (NNPCPART01).

1. **Reservoir and Renewable Energy**

Admittedly, the participants made mention of reservoirs and renewable energy, which were reported as work in progress. However, it was surprising to note that while the trend in the oil and gas industry was to produce low hydrocarbon fuel, the NNPC seemed to put effort into producing more hydrocarbon fuel, as reported by NNPCPART07:

"… We intend to globalise to enable us to surpass our competitors. It is our dream and the vision of NNPC to become a high-class hydrocarbon corporation. So, the answer to your question is to do well in Hydrocarbon Corporation, out-compete your competitors". (NNPCPART07).

"… The eight strategy, we have from NNPC key business focus is the renewable energy frontier exploration, this is to support the oil and gas business as the case may be, so there could be options for us to make more money to be more business minded ". (NNPCPART01).

Section 6.2 identified NNPC's growthe strategies employed to respond to the impact of internal and external environmental forces that impact on growth and profitability. These identified strategies include joint venture cash-calls, joint venture. This study also note on-going discourse on Work-In-Progress growth strategies.

In summary, although there are existing growth strategies, the corporation believes a need exists for more growth strategies to be implemented. Even though the corporation adopts organic growth strategy, its current and future growth strategies as shown in the excerpts indicate that external alliances play and will continue to play key roles for the purpose of technology, skillset, and funding. This is because the NNPC lacks required technology, skillset, and funding based on the excerpts of this data.

6.3 Conclusion

The chapter outlined a detailed account of the interview of twenty-one (21) respondents in the Nigerian oil and gas industry. Key themes and sub-themes were identified from the findings of the data analysis for this study.

The extract from the findings of data analysis reveals that NNPC's growth strategy and profitability is underperforming. This is due to the impact by environmental forces. Notable amongst the environmental forces are, decision making and communication, the role of HR (recruitment and selection), non-fixed tenure for the GMD, board members, and top management, skill set gap, amongst others.

Based on the impact of these environmental forces, the response mechanism deployed by the strategic drivers of NNPC as identified from the findings of data analysis include organic growth strategy, (exiting JV Cash-calls option, Joint Ventures), and Work-In-Progress Strategies (future strategy). This response aims to spur business profitability and growth within the global energy market. Nevertheless, this has not yielded the desired growth and profitability.

The next chapter (chapter seven) will introduce the discussion of findings. The discussion of the findings will focus on the identified themes with relevance to literature discussed in chapter two and three, while mirroring the three major constructs of in Pettigrew's (1988) framework being the study's theoretical lens.

CHAPTER SEVEN

Discussion of Findings

7.1 Introduction

Chapter six analysed data gathered for this study. Accordingly, this chapter discusses the findings produced from results derived in chapter six, interwoven with earlier findings from the pilot study. Hence, the discussion in this chapter will entail the similarities, differences, and relationships of the identified themes. This discussion is with relevance to literature reviewed in chapters two and three. Finally, based on the identified themes from the discussion of findings, a modified CCP framework is suggested in relation to the study's aim.

As discussed earlier, this study aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability. This is to understand the organisation's poor performance and low profitability and improve the adoption of sustainable growth strategies that will lead to organisation's growth and profitability.

To achieve this aim, the study presents the below research question which was developed based on literature and addressed:

What are the current growth strategies adopted by the NNPC, and how can these strategies be improved in response to environmental forces?

The findings in this study revealed "the role of government in the NNPC" as a significant external environmental force under the "context construct" affecting growth strategies in the oil and gas sector.

7.2 Context construct - The role of government in the NNPC

The findings in this study revealed the government and state to be the owner of the resource (oil and gas resources). In retrospect, the NNPC of Nigeria is the agency created with the monopoly of developing the resource, managing the investment and operations of sales of oil and gas products (NNPC 2018). By implication, this NNPC structure is contrary to the scholarly stance, thus negatively influencing the growth strategy of the NNPC. According to Mitchell and Mitchell (2014) this is a dysfunctional structure which leads to the dependence of the government and investors on the high rents available from production. Thus, discouraging privatisation which has been revealed to be a successful growth strategy adopted by other NOCs like, YPF, Argentina in 2010 and Rosneft, Russia 2013.

The role of government is discussed under the "context construct" as a broad theme that cuts across activities and significant findings in relation to other themes from the key findings such as "ownership structure", "funding", "regulatory structure", "non-fixed tenor for the GMD, executive directors", "technology", "human resources (recruitment and selection)", "decision-making, and lastly, communication".

7.2.1 Ownership Structure

As evidenced in this study, the state-ownership of the NNPC is significant considering that the historical context of the establishment of NOCs as revealed by Hartshorn (1993) and Garyson (1981). These scholars state that the NOCs were born out of dissatisfaction by host nations; this is because the IOCs protected the interest of the imperialist government. Thus, the NOCs, such as NNPC, was established to serve the sole interest of the Nigeria state by achieving socio-economic functions. However, like the issue resulting to the establishment of the NOCs (Al-Fattah 2013), the state-ownership of the NNPC was reported by the participants to have resulted in response to the needs of the state while neglecting the sole business purpose of profit making on which grounds it was established. According to NNPCPART12, for example:

"… *While the government is looking at the political side of your existence as a corporate body or an organisation, you have to look at survival".*

Accordingly, collaborating and reaffirming the findings by Tordo (2011) and Shleifer and Visny (1998) which shows that the management of NOCs by the government is less efficient and susceptible to market failures. The less efficiency and susceptibility to market failures may be result from their ideological orientation following the historical context of the establishment of NOCs, which continues to be evident in the behaviour and decision-making process of the oil and gas producing countries. This ideological orientation mirrors Fuyama's (2016) assertion that everything happening within and outside an organisation has a historical context. But regardless of the situation, Clegg et al. (2018) note that whether environmental forces are internal or external, they are categorised as a strength if they impact on the company's strategy positively and weaknesses when they prevent the organisation from achieving its set objectives. Accordingly, this suggests a necessary shift in this negative structure to a structure that permits state ownership but strictly managed by the organisation's expertise for efficiency (Thomson et al. 2017; Grant 2016).

This implies that the NNPC can design and achieve its growth strategies by developing robust strategies if it is allowed to take decisions independently without government interference. Hence, aligning with the below participant's view:

"… If NNPC is allowed to operate and to report to government, we will be more efficient and more effective". (NNPCPART01).

However, Mendelow (1981) points out the relevance of identifying and involving influential stakeholders in the case of the NNPC, the 'government' successfully incorporating environmental scanning into the decision-making needs of the organisation. This Mendelow (1981) stance is reiterated by Robinson and Simmons (2018) that point out that environmental scanning, though complex, nevertheless accommodates the diverse individual and organisational practices, hence allowing strategies to deal with the ever-changing environment (section 2.1).

7.2.2 Funding

Funding is the second most discussed theme, with 120 quotations in the study. Again, funding was a major force that was found to hamper growth strategy. This is because financial resources are a critical component leveraged by organisations to anticipate, prepare for, respond, and adapt to incremental and abrupt disruptions for survival and business viability (Lucy and Shepherd 2018; Sabol and Fučkan 2013).

Contrary to the findings of this research, Al-Fattah (2013) argues that the IOCs significance in the oil and gas industry continues to decline because of shrinking access to low-cost reserves, and lower operating profit margins because of the lack of autonomy. According to the findings in this study, NNPC is still dependent on the IOCs and other NOCs for strategy formulation cues. Even though scholars argue that it is relevant to consider internal and external forces facing the industry in the process of strategy formulation (Pettigrew 2001). Thus, the dependence of NNPC on the former and latter can be assumed to be a strategy for environmental scanning. However, findings in this study demonstrated that the dependence of the NNPC on IOCs in terms of strategy formulation was partly for financial reasons. This is because to thrive in the global energy industry the NNPC must improve its low capital base.

"… *We create a partnership with an entity that has funding or entity that can source for funding so that at the end of the project, we share whatever benefit comes out of that partnership*". (NNPCPART17).

Consequently, the claim in this study is validated that inadequate assessment of environmental forces guides the formulation of strategy, which has contributed, to the seemingly poor strategic direction(s) adopted by the NNPC. This also corroborates the findings of Tordo et al. (2011) that inadequate utilisation of internal organisations resources and competencies to influence strategy can hamper sustainable growth within an organisation.

Funding is a significant force influencing strategy formulation in emerging economies with government control like Nigeria (Nwokeji 2007). The control of funds by the government and limited access to funding by the NNPC is another force suggested as being responsible for the reliance on IOCs by the NNPC for strategy formulation cues. This claim corroborates earlier findings in the literature by Ledesman (2009), who argues that despite the fact that over the past twenty years, NOCs have broadened their activities by exerting greater influence in managing their own resources and activities as well as selecting which IOCs to collaborate with in the liquefied oil and gas (LNG) projects. However, for some countries like Nigeria, in the early development stages of LNG projects, the traditional model of IOCs managing the development of projects with their own human resources and supported by the NOC may still be the case. Nonetheless, findings in this study revealed that the NNPC have begun exiting cash-calls; the new strategy involving an arrangement whereby investors bring in human and financial resources and take sole responsibilities of the projects in exchange for profit sharing with the NNPC is the recent strategy adopted to bridge the funding gap.

"… The government controls NNPC funds from sales proceeds. Government interference in NNPC is a major issue. After all, it causes the funding challenge of NNPC because it also controls the revenue from NNPC". (NNPCPART14).

Accordingly, this finding provides strong evidence that the reliance of the NNPC for government funding creates dimensions of operational and administrative inefficiencies, incoherence in strategy formulation and implementation, and poor resource allocation decisions. These stated implications are interwoven with scant environmental scanning, aligning with the extant literature (Cuervo-Cazurra et al. 2014; Tordo 2011; Marcel 2006). These scholars view NOCs as bureaucratic entities, conflicting financial, operational, and social objectives that are poorly managed without coherence in their organisation's strategy.

Findings further revealed that the desire of the NNPC to go international was another reason for depending on IOCs for strategy formulation cues.

"… *number one, growth and meeting the expectations of shareholders, compete favorably, desire to move from the domestic shores to international energy market*". (NNPCPART16).

However, Marcel (2006) observes that IOCs are short-term profit driven. This mirrors the practice currently adopted by the NNPC evident in the short-term profit driven strategies for quick wins. This has led to the minimal achievement of the long-term profit objectives of the corporation stated in the twelve (12) key business goals of the organisation (Appendix 5).

According to Johnson et al. (2018), resources determine the implementation of strategy, and strategies can be forgone or aborted in the absence of resources.

Funding therefore is considered based on findings as a major force determining the implementation of strategy in the NNPC. Government control of revenue generated by the NNPC was another significant finding, shown to have significant effect on the implementation of strategies.

Accordingly, there is enough evidence in this study to suggest that the Nigerian government sees an opportunity to exert control over NNPC because of its funding power over NNPC. Likewise, findings from empirical study show full independence of NOCs such as the NNPC will limit government control over the corporation's management.

As stated by NNPCPART16 and reaffirmed by NNPCPART14, the government has sole control of the revenue generated by the NNPC:

"… Revenue generated from NNPC goes to the federation account. Thus, the government starves NNPC of its oil proceeds for strategic growth and business expansion". (NNPCPART16).

However, strategic management in successful NOCs shows that the government can own NOCs and intervene in its affairs but not make managers passive by assuming the role of management (Heller et al. 2014; Victor et al. 2012; Noreng 1994).

Because the finances of the NNPC is also controlled by the government, it is admissible to state that the dependence on government to release funding for projects has also contributed to the loss of competitive opportunities as a result of time-wasting bureaucracy, leading to missed opportunities.

In support of the above interpretation, NNPCPART02 collaborate:

"… Yea, project funding is an issue, what we do now is to let government know the level of value they are destroying as a result of their frequent interference. We try as much as we can to make presentation to government, If we allow ourselves to go with them hook line and sinker then the situation would be worse". (NNPCPART02).

In support of the opinion above, NNPCPART05 added:

"… *The role of government is so sensitive because it is the government that provides funding, thus determining NNPC's competitiveness, funding provides the needed infrastructures, funding creates strategic alliance".* (NNPCPART05).

According to NNPCPART07, amidst other forces affecting and determining the implementation of strategy, funding was a major issue:

"… *Funding has major impact as compared to the other obstacles".* (NNPCPART07).

This collaborates the stance that the trend adopted by NOCs in formulating strategies in recent times is based on organisational competence and financial resources as suggested by experts working within the organisation (Tordo et al. 2011), the NNPC still takes its cues from IOCs.

In addition, quick wins, which only aid the achievement of short-term goals to the detriment of long-term profit objectives, also guides the formulation of strategy to enhance competitive advantage as well as alternatives to strategy;

"… We are looking at the quick wins, the low hanging fruits and again what will give the maximum value to our stakeholders at a very minimal cost yet provide maximum value" (NNPCPART02).

This approach is similar to that adopted by the IOCS, as argued by Marcel (2006),

who claims that the IOCs are short-term profit-driven to the detriment of the long-term profit objective of the host nations or NOCs.

Overall, the findings in this study revealed the financial dependence of the NNPC on IOCs and other NOCs for insight into the strategy formulation and its implementation has contributed to the underperformance of the corporation;

"… *The underperformance of the entity gave rise to the existing growth strategies, benchmarking with other NOCs also contributed*". (NNPCPART07).

NNPCPART10 reported that strategy formulation was challenging for the corporation, hence the reason for the reliance for insight from other NOCs and IOCs.

"… *Selection of strategy is challenging, sometimes, we also try to copy from other NOCs, we try to see the performance of the strategy in other NOCs before we apply same in NNPC".* (NNPCPART10).

However, Pettigrew argues that an organisation's mission, goals, and objectives should guide the process of strategy formulation. Hence this can be interpreted to mean, that although an assessment of internal and external forces is significant in strategy formulation, the corporation will benefit from an assessment of its own strengths for sustainable growth in the process of strategy formulation. This assessment begins with an evaluation of external forces, followed by internal forces. This interpretation corroborates the suggestion of Robinson and Scott (2016), and Tushman and Romanelli (1985), who demonstrate that the coordination of internal strategy is essential for maintaining the status quo of an organisation even in the face of dysfunctional consequences because of performance downturns (section 2.1).

7.2.3 Regulatory and Legal Framework

The legal framework is a key force and played an instrumental role in influencing the formulation of growth strategies in the NNPC, thus every dilemma brought forward for consideration in the process of strategy formulation must be in alignment with the legal framework guiding the activities of the corporation. However, this practice is non-reflective of the CCP framework, where Pettigrew suggests that a critical analysis of distinct and verifiable events overtime should determine the formulation of strategies in response to change (Pettigrew 1977).

However, NNPCPART06, believes that the restrictions placed on the NNPC, by the NNPC Act of 1977 guiding the affairs of the NNPC has some form of restrictive clauses which in turn stagnates the formulation of viable strategies to enhance competitive advantage by the management:

"… We're asking ourselves do we have SBUs in the international environment. We don't have as we speak today". (NNPCPART06).

This result corroborates the findings of Al-Fattah (2013), who argues that a weak regulatory and fiscal framework contributes to the ineptitude of management of NOCs. Nevertheless, Johnson et al. (2018) and Grant (2016) believe that strategy formulation in a dynamic business environment such as the oil and gas industry should be in response to phenomena while also paying attention to the organisation's goals, mission, vision, values, objectives, and strategic statement, to prevent strategic issues and enhance growth (Lewin 2012; Akinola 2018; Nwokeji 2007).

Although the participants reported that there is a new bill up for consideration, which will serve as a business model, and once accepted, will support the diversification of business activities and lift restrictions placed on business operations. This Petroleum Industry Bill is yet to be passed and has been on the dilemma table for about 20 years. While other NOCs are formulating strategies to achieve sustainable growth (Tordo et al. 2011), the NNPC is held stagnant awaiting the approval of a bill to revise and continue its operations in response to environmental factors. However, Pettigrew argues that the environmental forces are not static, the oil and gas business is dynamic and thriving and the industry requires proactive strategies.

In summary, it is fair to state that an obsolete legal framework guides the formulation of strategies in response to current trends. Thus, a need to re-evaluate the framework, which guides strategy formulation and makes provision for changes to meet new trends in the industry, rather than new trends being manipulated to meet the legal framework as it disrupts profitability and sustainable growth.

7.2.4 Stage of board /Non-fixed tenure/ Inconsistency in Leadership

A significant finding in the study revealed that inconsistency in the tenure system of top management (strategic drivers of NNPC) is an issue posing a negative effect on strategy continuity in the corporation.

It is evident that the NNPC is routinely faced with the uncertainty of the leadership roles of the board (NASS) and top management (strategic drivers of NNPC) as these roles are more often occupied through government appointment (section 7.2.1.2). This pattern of government appointment of the strategic drivers is a control mechanism by the government and is underpinned by the moral and financial claim over the NNPC. This government appointment negates global best practice of the competency-based approach to recruitment and selection. Furthermore, government appointment established by federal character or quota system prevents the attraction and retention of specialised skills set in the NNPC that will dilute government control and enhance the attainment of profitability objective of the NNPC. This stance is reiterated by participants stating that this practice has not made provision for continuation in the formulation and implementation of strategies. This is because five to six different persons have taken up the role of GMD in less than ten years. Participant NNPCPART09, represents this concern in a quote:

"… *For me, obstacle one is our GMD tenure is not fixed, from 2011 till date, NNPC has had like five (5) to six (6) GMD, almost on a yearly thing. Thus, there is no continuation in policy and implementation, that is a big obstacle*". (NNPCPART09).

NNPCPART01 and NNPCPART11 further reassert the existence of uncertainty in the leadership of the NNPC as a result of incessant changes:

"… We have all manner of succession plans; the leaders are not even sure of their tenure". (NNPCPART01).

"… *Lack of leadership and clear succession plan are other obstacles too".* (NNPCPART11).

Similarly, the customers of the NNPC noted that the frequent change and short tenure system of the NNPC deters continuity in the organisation;

"… Frequent change of leadership that is undermining continuity in a business relationship, Un-written guidelines on how processes and transactions are to be conducted". (NNPCPART21).

The oil and gas industry reforms involve a transition from the focus on fossil fuel into other alternatives for profitability, competitive advantage, and viability. However, the NNPC is yet to proactively key into this opportunity (CBN 2018; NNPC 2018; DPR 2017). For instance, the NNPC established the renewable energy department (RED) in 2015 (NNPC 2018). Nevertheless, there is limited engagement regarding renewable energy sources such as wind, solar, geothermal, and hydropower in Nigeria (World Bank 2019; KPMG 2018). The limited engagement is underpinned by the skill set gap and frequent change in leadership that has made no room for a clear succession plan in the NNPC. Accordingly, absence of diverse engagement has negatively affected the prospect of transition from fossil fuel to other substitutes for profitability, competitive advantage, and business viability. This finding is consistent with Akinola (2018) and Akinrele (2016), who report and relate the limitation on the development of the NNPC to frequent leadership change, the ambiguity of business focus, and skill set gap (Akinrele 2016). NNPCPART01 in this study brings to light the negative influence of frequent leadership succession on the slow transition of the NNPC from the use of fossil fuel to low hydrocarbon forms of energy and its overall effect on the alternative and added sources of income to the NNPC;

"… The eight-key business focus of NNPC is the renewable energy frontier exploration. *This is to support the oil and gas business as the case may be, so there could be options for us to make more money to be more business minded, but you see the government apron string is one of the reasons why NNPC is not developing the way it [we] should have developed because of the interference. All manner of succession plans leading to the non-adherence of business focus".* (NNPCPART01).

NNPCPART09 resonates with this assertion:

"… The leaders are not even sure of their tenure, they could be appointed today and removed tomorrow; Strategies are not followed. So, we have this issue of "touch-and go" leadership style in the business, as the government is changing, the leadership of NNPC and its policies are also changing". (NNPCPART09).

Inconsistency in the tenure system of the strategic drivers of the NNPC pose a negative effect on strategy continuity in the corporation. This inconsistency is largely because of government control underpinned by its moral claim over the

NNPC. Accordingly, this control and moral claim is detrimental to the organisation's strategic process and attainment of business objectives.

Furthermore, it is evident from this study that the NNPC established the renewal energy department to aid the transition from fossil fuel to other alternatives. Nevertheless, there is a limited discourse on this transition to the renewable energy domain because of a lack of prerequisite skill and leadership issues. The key concern revolves around harmonising the diverse stakeholders in the NNPC towards the knowledge and understanding of the practical challenges and opportunities associated with the renewable energy global market in order to achieve profitability.

In summary, evidenced by this practice of lack of continuity, it is correct to state that the strategic drivers and employees of the NNPC lack the requisite skills and competence to drive a bankable growth strategy necessary for strong commercial mandates.

7.2.5 Technology

The relative slowness of the sensing and adjustment process of the corporation and failure to recognise that the bases of competition may have changed in the oil and gas industry was one of the major start-end-points revealed in this study. For example, while the literature revealed that many IOCs and NOCs are gradually moving towards producing low hydrocarbon energy (Akinola 2018; Akinrele 2016; Nwokeji 2007). It is significant to note that participants stated that one of the major goals set by the NNPC to gain global competitive advantage is becoming a "high-class hydrocarbon producing corporation" by increasing the exploration and production of oil and gas. According to NNPCPART07, for example,

"*… we intend to globalise to enable us surpass our competitors, it's our dream and the vision of NNPC to become a high-class hydrocarbon corporation"*.

The NNPC seems to be losing its competitive advantage both nationally and internationally due to poor technology and skill gaps. This is because both upstream and downstream workers are mainly partners working in collaboration based on profit sharing ventures and not major or direct employees of the NNPC.

Furthermore, technology is expensive, and funding is considered an issue in the NNPC (section 7.2.1.2). Thus, it is safe to assume that funding is related to the skill gap faced by the corporation with regard to its technology experience in terms of use and ownership.

This, corroborates the findings of Akinola and Akinrele (2018) who argue that oil and gas related technological gap in Nigeria can be attributed to inadequate funding of universities by oil and gas companies to undertake research and development in the area mentioned above. This can be attributed to the stance that most technological services are outsourced to foreign companies and suppliers at the phase of implementation as seen in this study.

In support of the opinion above, NNPCPART05 added that the government showed an unwillingness to fund the corporation to gain technological ownership.

"… Technology is key and very expensive and NNPC is struggling with it. *The role of technology is so sensitive because it is the government that provides funding, thus determining NNPC's competitiveness, funding provides the needed infrastructures, funding creates strategic alliance".* (NNPCPART05).

Technology has become synonymous to the success of the oil and gas industry and considering that earlier the participants stated that the government listens to the management when a superior argument is presented (Akinola and Akinrele 2018). Accordingly, it is necessary for the corporation to develop a channel via which facts and superior arguments can be presented in order to aid the ownership of technology by the NNPC through government funding.

7.2.6 Recruitment and selection process

Scholars point out the human resource management (HRM) focuses on the development and utilisation of human resources to identify the future needs of the organisation through adequate planning and training aimed at increasing the organisation's productivity (Nikollaou 2021; Hmoud and Laszlo 2019; Clegg et al. 2017; Barros et al. 2011). These scholars observe that the recruitment and selection process is an integral component of HRM. The recruitment and selection process commence with planning future needs, analysing job requirement, skills sourcing, screening, shortlisting, and selecting the right candidate for the vacant role. This process is followed by contracting, induction management, and the training of the selected candidate to fit the organisation's culture. Admittedly, the success of the recruitment and selection process in any organisations relies heavily on the effectiveness of the planning, organising, and analysis process to meet the organisation's strategic goals and objectives (Nikollaou 2021; Hmoud and Laszlo 2019; Barros et al. 2011).

The above mentioned HRM role is contrary to the current practice of HRM in the NNPC. This is evident, based on the data collected and analysed in this research, the role of HRM, recruitment and selection inclusive in NNPC negate the identification of the future needs of the organisation through adequate planning and training aimed at increasing organisational productivity. This is because of exerted pressure by the government and other critical stakeholders whose interest in including their representatives in NNPC's employment is contrarily to the commercial objective of the organisation. Accordingly, this has hampered all attempts to undertake a competency-based approach to recruitment and selection in the NNPC.

This is a significant finding in the study. This is because of the dynamic nature of the oil and gas industry and the recurring environmental forces that necessarily require employees' constant upskilling. Nevertheless, no recruitment has taken place in the past ten (10) years. Both top NNPC management and the NASS members reported this. According to Barros et al. (2011) long cycles of recruitment in businesses that are dynamic in nature, have negative effects on an organisation's relevance and competitive advantage globally. For example, NNPC participants made it clear that the NNPC does not determine the oil price in any way; this stance is consistent with the literature (Akinrele 2016; Tordo et al. 2011; Victor et al. 2012; Ross 2012, Nwokeji 2007). However, for a country that depends on oil and has large supplies this can be interpreted to mean the NNPC is not considered powerful in the energy industry. This is because of the possession of the inadequate skills required to promote growth within the oil and gas industry (Akinrele 2016; Mahdavi 2014; Victor et al. 2012; Ross 2012; Barros et al. 2011; Tordo et al. 2011; Nwokeji 2007). Furthermore, the observed weak state of the NNPC in the global energy industry is attributable to Nigerian government interference in the strategy formulation and implementation that has rendered the corporation ineffective. Accordingly, necessitating fuel importation to meet local and international demand.

"… *NNPC has not done the recruitment process in the last ten years, however, NNPC used its human resources department and outsourcing companies in the recruitment process that was conducted prior year 2000".* (NNPCPART14).

The NNPC has not recruited in the last ten years. NNPC top management corroborates that there is no recruitment stance. However, this top management were quick to state candidate competence as the critical factor that influenced the recruitment selection process prior to 2000.

On the contrary, while top management believes recruitment is based on competency-based approach, but the quota system and government appointment were the criteria observed to be stated by participants in mid-management. The mid-management level, have a strong conviction that quota system and government appointment guided the recruitment process in the NNPC prior to 2000.

Some of the participants believed that the recruitment process in the NNPC has positively influenced growth and development. Nonetheless, majority of participants assert that recruitment practices have contributed to the current skill gap issue within the organisation. This is evident in the sole reliance on partners for technology in the operations of the NNPC, which has become a culture in the organisation;

"… I think federal character / quota system and even the strategic selection process is not helping the company in many ways because of the specialised skill set need for this sector". (NNPCPART06).

"… *Issues of the skills gap, if there is special skills gap, federal character or quota system affect recruitment process, I think NNPC is resourceful, but we need to upskill our personnel to meet the current industry expectations".* (NNPCPART11).

There is scholarly assertion that skills are crucial to attaining organisational improvement, competitiveness, and employee preparedness to respond to environmental forces e.g., government, revenue priority, regulations, stakeholder management, amongst others (Osaghele et al. 2018; Harrison and Kessels 2004). Based on the identified themes from this study, the NNPC is yet to resolve its talent challenge, especially in the hiring of requisite skill sets that is vital for developing organisational and dynamic abilities that are critical in sustaining competitive performance. This is because of exerted pressure from critical stakeholders with diverse interests which include appointing their representatives to the service of the NNPC. This NNPC stance corroborates the Lepak and Snell (2003) claim that point recruitment and selection of requisite skills sustain organisation's competitive performance. Similarly, evidence from this study also suggests that the talent issue of the NNPC is also attributable to the government control mechanism over the corporation in terms of having a representative in the NNPC that will serve and protect their interests. These government representatives are involved in all the strategy formulation and implementation. For instance, the identified themes suggest that the NNPC currently suffers from a skill shortage to cater for the demand of the oil and gas industry, as scholarly observed (Akinola 2018; Osaghele et al. 2018; Akinrele 2016; Nwokeji 2007; Lepak and Snell 2003). This skill set gap is evident in the NNPC's inability to undertake complex offshore oil and gas projects (Akinola 2018; Osaghele et al. 2018; Akinrele 2016; Nwokeji 2007). Consequently, requiring the NNPC to outsource in order to address the effect of the skill shortage on its complex exploration and production projects with the IOC and other players in the oil and gas industry (Akinola 2018; Osaghele et al. 2018; Akinrele 2016; Nwokeji 2007).

"… *NNPC manages the holistic process from the exploration, production, refining, and gas development in Nigeria through profit-sharing contract with IOCs, we do this to breach the skill-gap in the upstream and downstream, although this is not so cost-effective."* (NNPCPART05).

Based on evidence from this study, it is admissible to state that the NNPC has not conducted any formal competency-based recruitment and selection process in recent years. However, prior to 2000, the NNPC conducted recruitment and selection employing a blend of a competency-based approach (outsourced) and informal method (federal character / quota system). This blended approach to the recruitment and selection process was applied to satisfy stakeholder interest (government, political class, host communities, amongst others). This is because all the stakeholders want their interests protected and preserved in the NNPC, being a cash cow in the Nigerian economy.

At this point, it is fair to state that the NNPC has a dire talent gap. This is further compounded by NNPC's inability to establish any relationship with the talent in the generation Y segment. According to Jauhar et al. (2017), the generation Y segment of the world's population includes people born in the 1980s and early 1990s. Generation Y demonstrate high confidence, are ambitious, achievement-driven, independent thinking, have an entrepreneurial mindset, and continually seek new career challenges (Jauhar et al. 2017). Understanding the need for Generation Y to be attracted and retained as a cadre in the workforce is crucial in attaining organisational growth and profitability. Nevertheless, the absence of this generation and their benefits is evident in the finding since the NNPC has not recruited in over a decade.

"… *There has been no official recruitment in the past ten years."* (NNPCPART07).

Conclusively, to achieve sustainable returns, enhanced production and decreased operational costs, there is a need for top management to review the existing talent management structure, expand their requisite skill asset search scope and even the codification of unwritten experience of either existing or transiting workforce in their organisation to achieve long-term yield in growth and profitability. (Taylor 2018; Al-Halal 2017; Anjo et al. 2017; Jauhar et al. 2017; Al-Daihani et al.2015).

7.2.7 Decision Making and Communication

From the findings in this study, hierarchy is an important element determining the power and influence of participation in the decision-making process of the NNPC, corroborating the findings of Yabarow and Muathe (2002) in Kenya and Abdalla (2014). The government as the major stakeholder in the NNPC and the top management were revealed to be involved in making strategic decisions for the corporation. This decision-making approach is also extended to the implementation of strategies as directives are given by the top management (NASS members and top management) to the bottom level:

"… Implementation directives comes [come] from the GMD's office, the corporate planning and strategy unit. These directives are passed to NAPIMS and Duke Oil Limited". (NNPCPART04).

"… Top management direct the implementation of both domestic and international strategies in alliance with the Corporate planning and strategy unit". (NNPCPART08).

In contrast to the top-down decision-making process adopted by the NNPC, Yabarow and Muathe (2020) argue that the long echelon of hierarchy involved in decision making and strategy implementation is not cost-effective as the longer the decision-making chain the more resources likely to be used in the process of strategy implementation.

Similar to the decision-making approach, horizontal communication in which information is disseminated among individuals, groups, and departments at the same level is adopted by the NNPC, the government, and top management who were therefore identified as the major decision makers involved in the implementation of strategy.

"… The major players are top management appointed by the government". (NNPCPART10).

Considering that various scholars have identified communication as a vital ingredient in the successful implementation of strategy and intertwined with decision-making (Chimanzi and Morgan 2005; Alexandra 2003), effective communication often provides reasons and answers the why behind decision-making through open communication. This enhances the performance of individuals and organisation as the expectations of the employees affected by any decisions are explained at the point of decision-making, and knowledge is shared. The negative impact of closed communication on an organisation's performance as argued by Guohi and Eppler (2008) were evident in this study. The authors argue that an organisation is not likely to perform well with restrictions placed on shared priorities, shared consensus, and prioritisation of growth strategies because of closed or horizontal communication. They further argue that employees in organisations adopting open communication are more likely to perform better compared to their counterparts working in closed communication systems. This is because effective communication enhances understanding of shared strategic priorities and consensus, thus enhancing organisational performance. For example, discrepancies in knowledge about relevant activities within the NNPC was evident when the participants were asked about the process of selecting alternatives to the strategy adopted by the NNPC. Only two participants in the top management team came to a consensus regarding key elements considered in the process of alternatives to strategy selection.

"… *Yeah, we have the Corporate Planning and Strategy Unit with competent and qualified personnel, who had undergone training, had traveled a lot, visited other nationalised companies and trying to collaborate with them. So, with the assessment tools we have, we are able to select the best alternatives. So, Corporate Planning and Strategy Unit creates scenarios, from the scenarios we are able to select what we feel would be best for the corporation. So, things are done scientifically".* (NNPCPART01).

"… Cognisance is given to environmental factors. Success stories by other NOCs and the willingness to learn in-order to grow profitably". (NNPCPART05).

In addition, there was no clear criteria to the selection of major players in the strategy formulation team, rather members of the top management seem to direct the researcher to the Corporate Planning and Strategic Unit.

"… That also authoritatively this may be given to you by the Corporate Planning and Strategy Unit, but I know that government has standards and that the Acts also provides for that and it's been a long-standing tradition to deal with international oil companies approved by the government". (NNPCPART01).

This limited knowledge can be attributed to the closed system of decision-making and communication. This attitude was also observed in the response relating to factors leading to formulation of strategies, corroborating the argument of Kolk and Levy (2001) that strong centralised decision-making processes are likely to impact negatively on an organisation's response to change. This can be attributed to closed communication resulting in individuals and groups within the same organisation chasing goals and objectives contrary to that of the organisation as these elements are not clearly described.

Pettigrew et al. (2001) assert that the complexities and dynamic nature of businesses and organisations require strategic clarity in communication; hence, vertical and horisontal communication processes are recommended to achieve greater strategic centralisation. This system supports and facilitates the acquisition and exchange of knowledge to promote organisational efficiency and achieve success with due consideration given to an organisation's values, goals, and objectives (Abdalla 2014; Yabarow and Muathe 2002; Lenhar 2004). The participants believed that effective communication involves a mix of both horizontal and vertical communication processes where all the stakeholders are involved in the decision-making and communication processes. Decision-making becomes a process guided by individuals or interest groups when strategic goals are clear, but the process of attaining them is top-down and not a mix of both horizontal and vertical communication. Accordingly, this constitutes a communication problem. However, Choo (2001) argues that complete rational decision-making requires information gathering and processing beyond its organisational ability.

In this study, all the participants established that the decision-making and communication in the NNPC take the top-down approach. The top-down approach limits knowledge sharing and resources, thereby contributing negatively to strategy formulation and implementation. However, as earlier revealed in the literature, strategic management has considerable discourse concerning the most appropriate approach to decision-making and communication in the oil and gas industry. For example, Alkhafaji and Nelson (2013) opine that the linear approach is crucial towards achieving a set direction for an organisation. Consequently, Thomson and Johnson et al. (2018) are in support of this notion, suggesting the critical assessment of formal plan systems, seizing of opportunities and response to environmental factors, with decision-making best understood by the top management as an approach towards decision making. On the contrary, findings in this study revealed inefficiency in the linear process of decision-making and communication as it limits the holistic process which encourages knowledge sharing, while restricting the participation and representation of relevant units in the organisation, whose staging of dilemmas could contribute to the creation of effective growth strategies.

This is also represented by (NNPCPART11).

"... *I think the implementation of strategies in NNPC is basically through the directorate. It is like a top-down directive. It starts from CEO, [that is] the Chief Executive Officer of NNPC who is like the Group Managing Director to other categories of staff through the directorate and subsidiaries,* [this is] *not collective".* (NNPCPART11).

This concern mirrors the suggestion of Pettigrew (1997) who describes decision-making in an organisation as an analysis of distinct and verifiable events together with the linkages between successful decisions over time. This can also be interpreted to mean decision-making and communication require several relevant actors in the organisation. Accordingly, the top-down approach of decision-making and linear communication was also identified as an environmental force affecting the growth strategy of the NNPC.

It is therefore evident that linear communication is the method of information flow in the NNPC. Fredrick et al. (1992) in support of Freeman (1984) identify stakeholders in an organisation to include clients, suppliers, employees, shareholders, government, host communities, and anyone who impacts or is impacted by the policies and activities of an organisation. Thus Fredrick et al. (1992) assert that the needs and interests of the aforementioned groups should be given consideration in decision-making and access to information flow (communication) (Mendelow 1981). However, reports from participants in this study identified as the clients/customers of the corporation revealed that the interest of the customers are not considered decision-making. Similarly, all the participants reported the time-consuming process of enquiry and consummation of projects in the NNPC due to bureaucracy to be an inconsiderate mode of operation. The inconsiderate mode of operation as observed by participants is perceived to be evidence of negligence on the part of the NNPC of the losses which this attitude is likely to cause the customers' business activities, also the manual mode of handling NNPCs customers was also attributed to this attitude;

"… The bureaucracy in operations wastes time and resources". (NNPCPART19).

"… *Yes, streamline bid process, NNPC should go digital like the other contemporaries – Saudi Aramco, Petrobras, Petronas, because these are critical and affect our business operations and profit".* (NNPCPART20).

De Jong (2008) argues that as energy demand continues to increase globally, cultural diversification amongst employees, partners, and stakeholders continues to intensify, and the slightest flaw in effective communication amongst the stake holders, is likely to result in loss of business value. This assertion suggests the relevance of effective communication between social groups and management as a tool for respecting human emotions, intelligence, expertise, appreciating teamwork and negotiating with business partners coming from diverse cultures (De Jong 2008).

Having discussed the key identified environmental forces influencing the NNPC's growth strategy and profitability, the next section presents discussion of the identified strategies in response to these environmental forces to spur business profitability and growth within the global energy market NNPC's top and mid-management employees.

7.3 Growth Strategy

This research aims to critically evaluate the impact of environmental forces on NNPC's growth and profitability. This is to understand the poor performance and low profitability of the organisation to improve the adoption of sustainable growth strategies that will lead to organisational growth and profitability.

Growth in the context of this research study is concerned with an organisation's survival and business viability, especially in this complex, volatile, and dynamic oil and gas industry business environment where the NNPC operates (see section 3.3.1, section 3.3.2, and section 3.3.3). Organic and inorganic growth strategies are the two broad growth strategies employed in the oil and gas business environment (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Grant 2016; Pettigrew 1992; Inkpen and Moffett 2011; Tordo 2011; Ansoff 1957). Similarly, these scholars note that privatisation and nationalisation as traditional growth strategies are utilised by NOCs in their bid to achieve business growth and viability, especially in the emerging economies of the world.

7.3.1 Organic Growth strategy

Although, the NNPC based on the findings, believes that the organic growth strategy is adopted in response to environmental forces to ensure growth within the corporation, a critical analysis of the findings revealed otherwise. This is because the current practice by the corporation were shown to be influenced by the political and economic development directions of the state, determined by state ownership (Thomson et al. 2017). This was another significant finding. This is because following the definition of organic growth strategy as a process through which an organisation leverages on utilising its own indigenously developed resources in the form of technology, organisational structure, human capital, management and leadership skills, financial capability and facilities (Johnson et al. 2018; Clegg et al. 2017; Grant 2016; De Wit and Meyer 2014; Ansoff 1957). Findings in this study revealed practice to go contrary to this definition. The NNPC relies mainly on partners outside the organisation for the resources mentioned above as a means of surviving in the contemporary oil and gas industry, as elaborated in later sessions in this chapter.

Furthermore, although previous studies have shown that the goals and objectives of an organisation should determine the choice of growth strategy adopted by an organisation for successful growth (Agnihotri 2014; Cao et al. 2012; Rodriguez et al. 2005; Meyer and Nguyen 2005). Mitchell and Mitchell (2014) agree with the above assertion but argue that considering the volatile environment and environmental forces affecting the operations in the oil and gas industry, the authors argue that strategic directions should be made flexible to adapt to the regular changes affecting the industry for sustainable growth. This reaffirms Pettigrew's (1992; 1977) argument that the process of strategy formulation and decision should be a continuous process of the analysis of both cautious and identifiable successive decisions over time. Accordingly, this implies that although the goals and objectives of an organisation should influence the adoption of strategy and strategic directions for oil and gas organisations, these should not be rigid as the operational environment is not static. In contrast with the above argument, the findings in the current study demonstrated that the major criteria guiding strategy formulation, and consequently determining the strategic direction of the NNPC is the political and economic direction of the state, attributed to state ownership. This in evident in a quote by NNPCPART08:

"… *Well, I would not say I know much about the factors influencing strategic direction in NNPC, but from the little I know there is no real criteria; it is based on the position you occupy. If today, you become a president, you automatically begin to formulate policy for NNPC, if you become a politician in National Assembly, you begin to formulate strategies for NNPC. And within the system, if you grow and* *attain the position of Group Managing Director or Group Executive Director, you begin to formulate policy for NNPC. There are no guidelines, rather is based on the position you occupy either in the organisation or National Assembly*".

This corroborates the assertion by scholars that "resource curse or development" can also be attributed to state ownership of NOCs. This is because in the oil and gas endowed nations leaders consider the oil and gas sector an industry for revenue generation (Thomson et al. 2017; Loung and Weinthal 2001; Capon 2008; Stokke et al. 1990), consequently prioritising the political and economic benefits of state over the commercial objectives of the organisation. However, these neglected commercial objectives are necessary for dealing with challenges, maintaining competitive advantage and ensuring growth (Akinrele EIA 2016; Chen et al. 2016; Domaski 2015).

In contrast to knowledge and learning, spreading the investment over time, no availability constraints, strategic independence, and culture management advantages of organic growth strategy (Johnson et al. 2018). The findings in this study revealed insignificant utilisation of the aforementioned advantages, rather an over-dependence on others through joint ventures was revealed as a disadvantage of this strategic direction.

Findings in the study revealed the NNPC's strategic direction to be more inclined towards the Loung and Weinthal (2001) definition of nationalisation in Retained State Ownership and Direct international Involvement (RSODII), which the authors describe as a situation whereby the nation takes ownership of its upstream, midstream, and downstream activities to maximise revenue from crude oil. However, in RSODII, the ownership structure is partly diluted with foreign investment and participation (Victor et al. 2012; Inkpen and Moffett 2011; Tordo et al. 2011; Loung and Weinthal 2001). This is the practice with the NNPC even though its legal framework is yet to be adjusted. Thus, the findings in this study revealed that the NNPC currently has a blurry and indecisive strategic direction. This issue requires urgent action, as the strategic direction of an organisation determines its response to environmental forces facing the oil and gas sector to ensure growth and profitability.

7.3.1.1 Joint Venture and Strategic Alliance

Findings in this study revealed that the legal framework guiding the NNPC in the form of its content strategy permits collaboration between the NNPC and other multinational oil companies only through Joint Ventures (JV) and profit-sharing contracts as represented by NNPCPART06 and NNPCPART01.

"… *For now, we are restricted from international investment by the 1977 Act, we only have joint venture partners".* (NNPCPART06).

"*… We have joint venture arrangements in production with Y, Z and X oil, hence, we invest in the upstream sector to increase our output in production at a cost, more like profit-sharing".* (NNPCPART01).

This corroborates the findings of Akinola (2018) about the NNPC, and the findings of Inkpen and Moffet (2011) which show that the legal framework guiding contractual agreements in sovereign states permit partnerships only through profit-sharing ventures.

Although Kohtamaki et al. (2013) and Bigdeli et al. (2017) describe networking as the relationship between two or more firms, moving beyond mere transactions to working together (partnership) through knowledge acquisition and sharing towards achieving competitive advantage. However, the findings in this study revealed a significant level of dependence by the NNPC on these partners (IOCs and NOCs) for technological skills and funding for survival.

"… *In choosing partnership, we try to find partners who have the technology we don't have".* (NNPCPART09).

As a result, validating the findings of Akinrele (2016) and Nwokeji (2007) who assert that the provision of this contractual form of agreement by the FGN is in a bid to breach the absence of technological skill and financial competence to accommodate upstream activities.

Nevertheless, an evaluation of this strategy in the absence of technology falls short of the business strategy of partnership and outsourcing. According to Globerman (2017), the business strategy of partnership and outsourcing is mainly informed by the benefits of minimising costs and maximising profits in the activities of exploration, refining, petrochemicals, product transportation and marketing which are the core upstream and downstream business activities of the corporation (Levy 2004; Kern et al. 2002; Hayes et al.2000). In addition to this scholarly stance, Mitchell and Mitchell (2014) reported that between 2006-2011, NOCs and their governments believed in confidence that there was a growing demand for oil resources and a likelihood of an increased oil price. Thus, they anticipated benefits to be derived from the share of world production resulting from a price increase. Consequently, one of the strategies adopted was partnership and strategic alliances to gain access to lifted opportunities in OECD countries. However, shares of world reserves remained more or less the same, from 2006-2011, market shares were lost by NOCs who followed the old model of exclusive operations or partnerships. According to these authors, NOCs have a weaker bargaining position in joint-ventures than they did a few years ago due to the consistent changes in demand and supply emanating from the increased impact of environmental forces on the industry (Akinola 2018; Baffes et al. 2015; Chen et al. 2016; Domaski 2015; Le and Chang 2015; Inkpen and Moffett 2011). Thus, there is a need to re-think this current strategy adopted for growth by the NNPC.

Similarly, absence of technology puts a strain on achieving increased oil production and reserve growth which is the fourth (4th) business goal of the NNPC. This is evident in the findings as the participants raised concerns about the high investments in technological assistance by the NNPC in upstream and downstream activities having negative effects on profitability.

"… *The profit margin in NNPC is insignificant due to production sharing contracts".* (NNPCPART14).

"… NNPC manages the holistic process from the exploration, production, refining, and gas development in Nigeria through profit-sharing contract with IOCs, we do

this to breach the skill gap in the upstream and downstream although this is not so cost-effective". (NNPCPART05).

This is similar to the findings of Okomus (2001), which show that a lack of skill by an organisation leads to the need for assistance from external companies resulting in the transfer of a considerable amount of resources, this can also affect profit-making as seen in the case of the NNPC. The issue of partnership or networking having a negative effect on profitability because of profit sharing has been argued by Okomus (2001) to be an issue peculiar to emerging economies. Accordingly, Lederman and Maloney (2007) argue, that natural resources promote growth when combined with the accumulation of knowledge. The skill-gap in the NNPC however, can be attributed to the limitation placed on the role of human resources (HR) management because of government interference. Government interference limits the functionality of the HR in needs assessment, recruitment and selection, training, and upskilling the current labour force to meet the dynamic trends in the oil and gas industry (Taylor 2018; Al-Halal 2017; Anjo et al. 2017; Al-Daihani et al.2015).

Hence, a need for an adjustment in the partnership ideology and growth strategy of the NNPC to focus more on knowledge acquisition rather than sole dependence on partners, through the utilisation of the expertise of its HRM.

Prior sections of chapter seven have provided discussion of the key findings relevant to the literature reviewed in chapters two and three while mirroring the three major constructs of Pettigrew's (1988) framework. This last section of chapter seven will focus on the critical themes identified in the study, leading to a modification to the existing Pettigrew framework, particularly for the NNPC and NOCs in the world's emerging economies.

7.4 Summary of Key Themes/Modified Pettigrew Framework for NNPC and NOCs

This section summarises the key themes identified from this study and relates them to the three major concepts in the CCP Framework. These identified themes based on findings have been fundamental in creating a robust growth strategy,

hence, providing organisations with resilience to deal with the industry's unexpected trends and gain a competitive advantage.
These identified themes create room for proactive strategy development to ensure growth and profitability in emerging economies with similar characteristics such as the NNPC. Communication, decision-making, and human resource management are the three key identified themes necessary for ensuring growth strategy and profitability in the NNPC.

7.4.1 Communication

The success or failure of human interaction is dependent on communication (Keghku 2005) which is the core of human interaction. The presence or absence of communication determines the outcome of human interaction. This is evident in the NNPC as communication is used more as a channel/medium to inform rather than a process of sharing knowledge, sending information, and receiving feedback. This form of one-way communication leads to resistance to change from employees and consequently following changes which have increased working pressure with no outright benefits. This finding resonates with Buchanan et al. (1999) who state communication is an essential process for organisational change and achievement. In recent times, with environmental scanning becoming a major part of organisational processes (Robinson et. al 2020), which enables management to plan the organisations future in relation to the external environment, communication and a consensus concerning the nature of the information to be gathered to align with the stakeholders and organisational mission becomes necessary. However, communication has been discussed in relation to organisational change as a passive element (Okumus 2003; Pettigrew 1992). These scholars point out that communication is relevant at the stage of implementing of an already formulated strategy. This unclear mode of communication is evident in the anomaly in the data, as the majority of the employees and NASS members in the study revealed uncertainty concerning the guidelines for strategy formulation and selection of board members responsible for formulating strategies. Lastly, the impact of the poor communication between the NNPC and its stakeholders was demonstrated in the uncertainty about the organisation's current strategic direction. According to Niraula (2012), effective communication promotes understanding among persons or a group of people as information is passed, searched, feedback received, knowledge is shared, and agreements/guidelines developed at this stage, thereby creating shared meaning amongst parties. Findings in this study revealed that there is limited communication at crucial stages of idea development in the NNPC. This has not only made the organisation lag in industry trends, it also undermines organisational capacity, resulting in the skill-gap currently experienced in the organisation. This is due to poor interaction among different layers of the organisation on "what should be done, how it should be done and by who". De Jong (2008) argues that as demand for energy continues to increase globally, cultural diversification amongst employees, partners, and stakeholders continues to intensify, and an ineffective communication amongst the stakeholders is likely to result in loss of business value. Accordingly, effective communication is a crucial construct to be represented at every stage of organisational change.

7.4.2 Decision-Making

According to Okomus (2008), the structure of an organisation determines the overall distribution of power and overall decision-making process, as well as the division of labour, roles and responsibilities in an organisation.

Findings revealed the decision-making and implementation process in the NNPC takes the top-down approach, with the NASS and top-management referred to as 'directorate' mainly making the decisions. However, findings in this study revealed dissatisfaction concerning the top-down decision-making process as participants believed this approach limits the creation and staging of dilemmas that can be suitable for strategic growth. This is because the bureaucratic nature of the NNPC that suppress such ideas before they reach the appropriate power. In support of this finding, the literature reveals that the complexities which exist in businesses and organisations require strategic clarity through communication. This is because communication supports and facilitates the acquisition and exchange of knowledge to promote organisational efficiency and success with due consideration given to the values, goals and objectives of an organisation in the course of decision-making (Abdalla 2014; Lenhar 2004; Yabarow and Muathe 2002).

As earlier revealed in the literature, there has been considerable discourse in strategic management concerning the most appropriate approach to decision-making in the oil and gas industry. For example, while Alkhafaji and Nelson (2013) opine that the linear approach is crucial to achieving a set direction for an organisation through a critical assessment of formal plan systems by top management, Pettigrew (1977) describes decision-making as an analysis of distinct and verifiable events together with the linkages between time and context. However, based on findings in this study, decision-making is the role played by the government and top management, with government mission at the core of decisions taken. Thus, resonating with the argument of Mendelow (1981) and Freeman (1984), both authors identify stakeholders in an organisation to include clients, suppliers, employees, shareholders, government, host communities, and anyone who impacts or is impacted by the policies and activities of an organisation. Hence, suggesting that the needs, and interests of the aforementioned groups should be given consideration in decision-making (Fredrick et al. 1992).

Boulmetis and Dutwin (2000) argue that due to the power associated with stakeholder groups, effective evaluations depend on the stakeholders' overall perception and belief. Thus, decision-making and communication are further revealed to be intertwined in this study, as decisions have to be reached by a diverse group of stakeholders through effective communication.

Secondly, the legal framework of the corporation guided by the NNPC Act 1977 was shown to guide the strategic decisions and direction of the organisation. For example, while the NNPC intends to expand in international trade and penetrate the international markets, there is currently no international trade strategy. This is due to the legal framework that restricts the organisation from investing internationally. The adoption of the claimed organic strategy by the corporation in blueprint but the application of nationalisation in technical terms has also placed the corporation in a vague direction on the current growth strategy adopted. However, Nutt (1976) and Asrilhant et al. (2004) argue that a specific model should not guide decision-making as this process should be determined by an assessment of the capabilities of the organisation and environmental factors.

Abdalla (2014) argues that the involvement of stakeholders at every level in decision making is crucial for prioritisation, knowledge sharing and understanding in the process of strategy formulation. In addition, with environmental scanning as a crucial organisational process, there has to be an analysis of the type of information needed or that needs to be gathered in order to embark on focused environmental scanning (King and Cleland 1978; Mendelow 1981). Hence a need exists for collective decision-making amongst stakeholders, guided by an analysis of successful decisions over time and an assessment of environmental factors to achieve growth strategy and profitability within an organisation.

7.4.3 Human Resource Management

The distinctive approach to employment management, which seeks to achieve a competitive edge through the strategic deployment of a highly committed and capable workforce using an integrated array of cultural and structural techniques (Storey 1995) is the core function of human resource management.

Firstly, findings revealed that no formal recruitment has taken place in the NNPC in a decade, and hence there were no clear guidelines for recruitment. However, prior to 2000, where personnel were recruited based on short-term needs, the government influenced the process by presenting candidates, with federal character/quota system highlighted as the primary selection criteria.

The essence of recruitment by HR is to achieve the organisation's goal by appointing competent individuals (Itika 2011) who will contribute to the overall growth and development of the organisation by achieving the mission or the organisation and making a profit (Aoin 2017). However, this study further revealed no clear relationship between recruitment and organisational yield, as the NNPC reported that the organisation had made no profit in years. Johnnie (1997) further argues that the quota system of employment in Nigeria has led to the recruitment of unqualified persons, resulting in the inability of organisations to accomplish their mission. This is evident in the NNPC as the organisation currently experiences technological skill gaps, thereby relying on JVs and partnerships for technology, which is not cost-effective (Mitchell and Mitchell 2014). The skill gap experienced in the NNPC popularly referred to as 'skill-set' in the study was also revealed to result from government interference which limits and undermines the role of the HR team in the organisation. Thus, the role of HR in organisational strategic growth has been demonstrated to be an important environmental force that determines the growth strategy and profitability in an organisation through the recruitment of the best talent and training to upskill current employees to meet future trends in the industry (Georgiadis and Pitelis 2012). Thus, the HR in the NNPC needs to perform the role of recruitment to form a formidable workforce by including the four generations in the workforce which enhances an understanding of diversity in the work-related values and attitudes of employees (Crumpacker and Crumpacker (2007), resulting in the achievement of the overall goal and objectives of an organisation. This accumulation of diverse talents is also essential for innovation and problem solving, crucial for organisational growth strategy.

In addition, HR is responsible for cultivating organisational culture that encourages planned succession initiatives. This will discontinue the current problem of non-fixed tenure experienced by the NNPC. Pettigrew (1991) does not include the role of HR as an inner organisational context that determines organisational change.

7.5 Chapter Summary

This chapter discussed key environmental forces influencing the NNPC's growth and profitability and the identified strategies in response to these environmental forces to spur business profitability and growth strategy within the global energy market by the NNPC's top and mid-management employees.

These findings reveal that despite the dynamic nature of the oil and gas industry, and the major environmental forces challenging the growth of the industry, the NNPC is yet to adopt and focus on specific strategies to ensure growth, profitability, and business viability.

The key environmental factors challenging the growth strategies in the NNPC was revealed to be "the role of HR", "decision-making and communication". Others include "ownership structure", "funding", "regulatory structure", "non-fixed tenure for the GMD, executive directors", and "top and mid-management, and "technology".

The overall risk assessment of the industry is vague as major decision makers are the government rather than experts in the oil and gas industry. The interest of the customers and other stakeholders were not identified to influence in any way strategies adopted by the NNPC. This in turn has affected the growth of the corporation as no definite model was identified to guide the activities and co-operation of the corporation.

Based on the review of the literature, NNPC's growth strategy centres around an organic growth strategy through joint ventures and profit sharing. This is not in sync with the current trends adopted by NOCs in response to the environmental forces affecting the industry. The literature suggests research as a key factor as assessment of the internal and external factors affecting the industry as significant issues to be considered in formulating and implementing strategies. Contrary, the NNPC was revealed to be focused on government aspiration which the literature reveals to be a major cause of low profitability amongst NOCs.

Accordingly, based on the evaluation of the current problems affecting the growth strategies in the NNPC and literature recommendations, a framework is created to guide standard processes for strategy formulation and implementation to promote growth, enhance profitability and build sustainable relationships with customers both nationally and globally for the NNPC. Recommendations are also made in the last chapter in line with the discussion of these finding.

CHAPTER EIGHT

Conclusion

8.0 Introduction

This chapter addresses the research question set in section 1.4. Thus, providing an evaluation of the situation of the NNPC asset in the objectives of the study. The chapter progressed by highlighting the key contributions to knowledge and practical recommendations to NOCs, particularly the NNPC. Limitations and suggestions for future studies are also presented in this chapter. The contributions made in the current study are necessary because of the critical gaps identified in conducting the literature review. Based on previous research, it is evident that several studies have identified and agreed that environmental forces influence the oil and gas industry. For example, while Inkpen and Moffet (2011) point out innovation and technology, substitutes, and alternative fuels, amongst others, as major external environmental forces triggering evolutionary change and the innovation of growth strategies, unpredictable demand, and supply market, increase in global competition. In addition, the role of stakeholders in the organisation's decision-making process has been highlighted by Akinola (2018) and Tordo et al. (2011) as major concerns amongst policy and decision-makers in the oil and gas sector.

On the other hand, government involvement in NOCs (Steven 2003; Tordo et al. 2011) and the legal framework guiding the business dealings of the NOCs, have been identified as significant factors influencing growth strategies in the oil and gas sector (Hunter 2014; Ekhator 2016). However, limited studies explore the effect of these forces on growth strategy in the oil and gas industry. Thus, there is a need for in-depth insight into the impact that these forces have on growth strategy. Accordingly, the current research sought to better understand the perception of NNPC's employees and stakeholders of the current environmental forces affecting the oil and gas industry and how Nigeria's NNPC can respond appropriately to its own context as a developing country with surplus oil and gas. An appropriate response to these environmental forces will help the NNPC to maximise the opportunities and overcome the negative impact of these persistent, uncontrollable forces.

Thus, the study adopted the CCP Pettigrew framework and focused on the context and content constructs to explore the various environmental forces affecting growth strategy in the NNPC and the impact of environmental forces in the oil and gas industry. This is because previous studies on environmental forces affecting the oil and gas industry have a limited focus on these environmental issues (see section 1.2). To gain a comprehensive insight into the peculiar environmental forces causing challenges in the growth strategy of the NNPC, in-depth semi-structured interviews guided by constructs from the CCP Pettigrew framework were adopted, contrary to previous studies which had used survey and structured interviews. The approach was further elaborated with focus on strategy formulation and implementation concerning stakeholders, as this is argued in chapter three to be relevant to achieving growth strategy.

The next section of this chapter will evaluate the situation of the NNPC asset in the objectives of the study.

8.1 Summary of key findings

The findings of this study reaffirm that environmental forces play a significant role in the context of the oil and gas industry, including the NNPC. Furthermore, these environmental forces exist both in the inner and outer context of the organisation. These identified environmental forces and their impact on the oil and gas industry are discussed under key themes and sub-themes in this section.

1. **Government Interference.**

The study revealed government interference to be the significant environmental force that impacts every aspect of growth strategy in the NNPC. The dynamic and volatile nature of the oil and gas industry calls for constant innovation to remain relevant in the industry. However, the organisational structure of the NNPC as designed by the government serves as an impediment to the growth strategy of the corporation. The structure undermines or has relegated the human resources (HR) and corporate planning and strategy (CPS) team to the background as these teams are merely informed to carry out instructions rather than getting involved in discussions (communication) on strategic issues leading; to decision-making, recruitment and selection functions, amongst others. This has increased the untimely response of the corporation to the trends in the industry. For instance, a lack of workforce and succession planning discovered in the study is indicative of lack of strategic maturity of the function of HR. This is because the HR function treated marginal.

Similarly, the skill gap in the context of knowledge of technology and its application is on the increase as the HR team do not participate actively in trend analysis in the oil and gas industry. Rather much reliance is placed on other NOCs and IOCs for data projections and analysis as revealed in this study. For instance, roles to be created, who needs to be hired, and competencies to be upskilled has not been determined. This HR gap is especially in the context knowledge of technology has not been critically analysed as revealed in the study because of government interference in the HR functions in the NNPC.

From the outer context, the organisational structure, which includes ownership structure, communication, non-fixed tenure for the GMD, executive directors", and "top and mid-management and funding, and the legal framework were the major forces identified to have an impact on the growth strategy in the NNPC. The forces were revealed in various ways to hinder the strategy formulation and implementation with attendant reciprocal effect on the growth strategies. These forces were evident sometimes because of the communication and decision-making process which takes the top-down method, as relevant suggestions emanating from the bottom of the employment hierarchy or people with direct contact with the trends in the industry are substituted with suggestions for national growth. In the case of legal framework having a negative impact, some strategies cannot be formulated or will have to be aborted after formulation despite its relevance for growth because of restrictions placed by the legal framework (NNPC Act 1977) guiding the organisation. For example, international strategies can not be formulated nor implemented because of the restriction placed on international trade in the NNPC Act 1977. This NNPC Act 1977 does not allow effective and efficient management of the upstream and downstream of the oil and gas value chain. This is because of the moribund clauses that prevent increased level of accountability and transparency required for global commercial entity. Similarly, NNPC Act 1977 does not allow nor attract investment capital that will create changes in the corporation's governance, administration, and regulatory framework. In particular, the decision-making, communication, and human resources were found to be a dominant environmental force affecting the growth strategy of NNPC.

In the construct of decision-making, the linear process of hierarchy is adopted with the government as the major stakeholder involved in the process. On the other hand, communication takes the top-down approach based on hierarchy. Neither the trends in the industry nor employees or customers' needs are taken into cognisance in the process of decision-making and communication (linear). However, Fredrick et al. (1992) identifies anyone who impacts or is impacted by the policies and activities of an organisation as stakeholders, including clients and suppliers, and their needs should be given consideration. Accordingly, De Jong (2008) argues that considering the increase in demand in energy, intensifying cultural diversification amongst employees, stakeholders and partners, effective communication is crucial for successful growth in businesses. This suggests a holistic method of communication and a non-linear decision-making process which encourages knowledge sharing and immediate feedback as areas of interest and organisational benefit are assessed with relevant stakeholders. Contrarily, this was not evidenced to be in practiced in the NNPC as revealed by this study.

In the case of the role of Human Resource (HR), it was evident from the findings in this study that they have been relegated to the background. As appointments and contracts were revealed to be carried out by the government mainly, while the HR team oversee the employment agreements. Thus, limiting the team in the performance of its major employment role which involves; conducting organisational need assessment based on current and future trends in the industry, searching for best talents and recruiting them to perform within the organisation. This has resulted to inefficiency by the NNPC to recruit the best skills to assist the organisation to compete favourably in the dynamic oil and gas sector (Aoin 2017; Itika 2011; Al-Bahussin et al. 2013). This inefficiency is most pronounced in technology, which has been stated as one of the viable attributes that make for wins in this sector (Akinola 2018; Akinrele 2016; Mitchell and Mitchell 2014; Nwokeji 2007; Ashrilhant et al. 2004; Choo 2001).

2. Growth Strategies

Organic and inorganic growth strategies are the two broad growth strategies employed in the oil and gas business environment (Johnson et al. 2018; Bigdeli et al. 2017; Clegg et al. 2017; Grant 2016; Pettigrew 1992; Inkpen and Moffett 2011; Tordo 2011; Ansoff 1957).

In retrospect, NNPC does not have clear deliberate or emergent strategy nor both but rather taking a cue from the other NOCs and IOCs due to resource inadequacy (section 3.2 and section 3.3). The growth strategies in the NNPC can be considered as still being an issue of work in progress. Still, one major and minor growth strategy identified to be adopted by the NNPC is joint venture (JVs) and existing cash calls. The approval of joint venture as a growth strategy is as a result of the legal framework (NNPC Act 1977) governing the operations of the NNPC. Thus, this is present in the content strategy of the organisation at the networking level.

Exiting cash-calls is another growth strategy revealed to be adopted by the NNPC in recent times. This strategy involves an arrangement whereby investors provide both financial and human resources to take up sole responsibilities for projects in the NNPC, in exchange for profit sharing. Although, prior the exiting cash-calls strategy, Joint Ventures were the major form of strategy adopted by the NNPC. In this Joint Venture strategy, projects were embarked on with the NNPC providing 60 per cent and the partners 40 percent of the financial commitment. Findings revealed the NNPC have difficulties in fulfilling their part of the agreement. However, this new strategy of exiting cash-calls involves an arrangement whereby investors provide financial and human resources to take up sole responsibilities for projects in the NNPC, in exchange for profit sharing. This is contrary to the former practice of the NNPC of sharing the expenses of such projects on a ratio of 60:40 per cent with the former percentage allocated to the NNPC. Although this seeming growth strategy is adopted in a bid to bridge the funding gap, it has been argued by Marcel (2006) to be a short-term profit-driven strategy. Furthermore, this strategy discourages independence and skill acquisition, thus increasing rather than narrowing the skill gap and minimising profit. This argument is also evident in the NNPC, as partnerships are sought with the sole aim of complementing the existing technological skill gap in the corporation.

3. **Poor growth and profitability**

The findings revealed that based on the current practice of the NNPC of dependence on other partners for technology, skills set, and financial support, the sole purpose of networking, which is the acquisition of skills, and a process of knowledge sharing is not appropriately utilised. Rather these ventures through partnership and profit-sharing have led to profit losses for the organisation, hence, insignificant profit actualisation for the NNPC has been achieved through its current growth strategy.

Based on this insignificant profit actualisation for NNPC, the study employs and

extends CCP (Pettigrew) that will lead to organisational growth strategy and profitability.

4. **The modified CCP (Pettigrew) framework**

Underpinned by the critical evaluation of the current problems affecting the growth strategies in the NNPC, the identified key themes from findings, and the literature recommendations, this study designed a modified framework to guide standard processes for strategy formulation and implementation in NNPC. This CCP (Pettigrew) framework passively captures the themes of the communication and decision-making process, and human resources which are dominant and critical in this study. Accordingly, a modified CCP (Pettigrew) framework became necessary because of the passive nature of these themes in the existing model. Application of this modified framework will promote growth, enhance profitability, and build sustainable relationships with customers both nationally and globally for the NNPC (see section 7.6 for modified Pettigrew Framework for NNPC and NOCs).

Furthermore, this study has enhanced the utility of CCP (Pettigrew) framework, particularly in NOCs operating in emerging economies, such as Nigeria.

8.2 Contribution of the Study to Knowledge

This study is underpinned by the perceived impact of environmental forces on NNPC's growth strategy that has led to poor performance and the low profitability of the corporation. The findings constitute the representative perspective of the impact of growth strategies adopted by the NNPC in response to environmental forces.

Accordingly, the contribution to knowledge in this study is provided from two dimensions: theoretical contribution and contribution to practice in the oil and gas industry.

8.2.1 Theoretical contribution

While conducting this study, several concepts, theories from extant literature were reviewed. The Pettigrew (1988) theory with Context and, Content and Process constructs was adjudged suitable and deployed to guide the study (section 4.1). Empirical evidence confirms the utilisation of The Pettigrew (1988) theory in developed economies such as Canada, the United Kingdom, and the USA (Bonn and Pettigrew 2009; Stockdale and Standing 2006; Thibault and Babiak 2005; Pettigrew and McKechnie 2001; Pettigrew et al. 1988). These scholars confirm the utilisation of this Pettigrew theory as an interpretive approach in the evaluation of information technology industry, hospitality industry, sport industry, management-consulting industry.

However, within the research study context, there is limited attention paid to utilising the Pettigrew (1988) theory to extend investigation into the oil and gas industry, let alone, in conducting a critical evaluation of the impact of environmental forces on growth strategies in nationalised oil companies such as NNPC, Nigeria.

Accordingly, this study theoretically contributes to knowledge by extending such research through the utilisation of the Pettigrew (1988) theory with Context, Content, and Process constructs to critically evaluate the growth strategies adopted by the Nigerian National Petroleum Corporation (NNPC) in response to environmental forces affecting the oil and gas industry. The intention is to understand the organisation's poor performance and low profitability to improve the adoption of sustainable growth strategies that will lead to organisational profitability. Prior this research study, no empirical evidence existed concerning the utilisation of this theory.

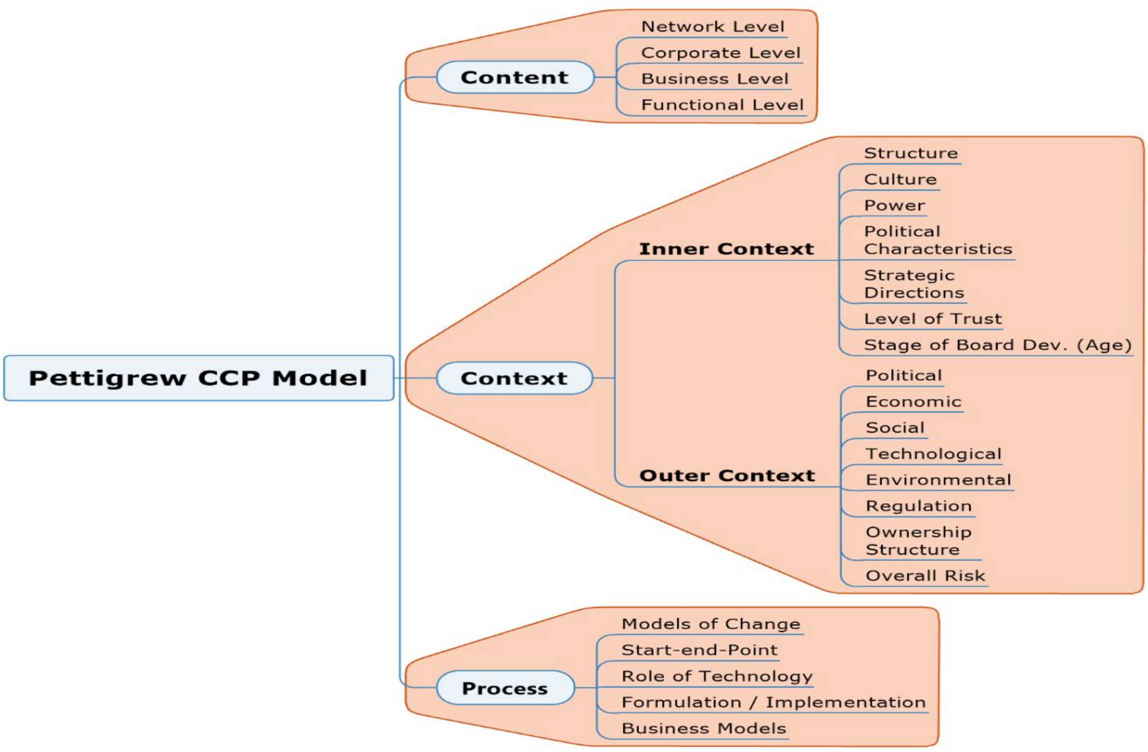
Hence, this research result has added further theoretical depth to strategic management literature on the Pettigrew (1988) theory to the oil and gas industry. This was achieved through a modified Pettigrew (1988) theory that could be further applied to future research study.

Progressing from the modified Pettigrew (1988) Theory, this research has addressed the concerns raised by the critics of the Pettigrew (1988) theory (Caldwell 2006; Carter 2000; Dawson, 1994; Buchanan and Boddy 1992; Buchanan, 1991). These scholars argued that the Pettigrew theory lacks the required interrelationship between the inner context and outer context. They also point out that limited attention is given to the strategic drivers and managers of an organisation. This study bridged these observed gaps conceptually by introducing key themes identified in the study into the Pettigrew (1988) theory. These three dominant themes are communication, decision-making, and the role of human resource management (Figure 12). Although, the constructs of communication, decision-making, and the role of human resource management has been discussed in relation to organisational change as passive elements (Okumus 2003; Pettigrew 1992). Findings in this study revealed that communication and decision-making are crucial at every stage of strategy formulation and implementation, thereby bridging the gap between the inner context and outer context of the Pettigrew (1988) theory. Similarly, the role of human resource management include relationship building between an employer and employee and among employees in the workplace to avoid conflicts and disputes. Accordingly, recognition of the HR role will ultimately give adequate attention to the strategic drivers of the organisation. Furthermore, this study revealed that decision-making is the role played by the government and top management (section 7.5.2). Thus, resonating with the argument of Mendelow (1981) and Freeman (1984), both authors identify stakeholders and advised that the needs and interests of the strategic drivers be given consideration in decision-making (Fredrick et al. 1992).

Furthermore, this study stressed the contexts in which NOCs, particularly, the NNPC, in an emerging economy such as Nigeria formulate and implement growth strategies in response to environmental forces to achieve growth strategy and profitability. Accordingly, the study employed the Context, Content, and Process (CCP) in the Pettigrew (1988) theory in examining a range of dynamic dilemmas within the NNPC. Afterwards, an enhanced and modified framework is suggested for the NNPC and NOCs in the emerging economies of the world. In the light of these, the study has contributed to the theoretical knowledge of emerging economies in the context of identified themes such as "decision making and communication", "role of human resource". Other identified themes include, "ownership structure", "funding", "regulatory structure", "non-fixed tenure for the GMD, executive directors", and "top and mid-management, "technology", and most importantly, and the impact of these themes on organisational growth in the context of emerging economies.

The NNPC dilemma was situated vis-à-vis the Context, Content, and Process (CCP) in the Pettigrew (1988) theory to examine the impact of environmental forces on growth strategy in anticipation of growth and profitability. The proposition justifies the constructs of Context, Content, and Process (CCP) and the sub-themes in the Pettigrew (1988) theory as shown in figure 11 below:

Figure 11: The Pettigrew (1988) three lens theory



Source: Pettigrew (1988).

A new construct added by this study is "decision-making, role of HR, and communication". Strategic management literature should recognise this new construct, that is, decision making and communication in a stronger and dominant form.

- Multi-dimensional communication

Findings in this study revealed that communication is crucial at every stage of strategy formulation and implementation, thereby bridging the gap between the inner context and outer context of the Pettigrew (1988) theory. This study based on findings adds that multi-dimensional communication (section 6.1.2.3, section 7.2.7, section 7.4.1, and Figure 12) should applied involving various relevant actors and all other stakeholders involved in the value chain system. Multi-dimensional communication should be actively adopted at every stage of the concepts, as findings and literature show that communication plays a significant role in organisational growth and sustainability.

As revealed in the literature, the world, particularly, the oil and gas industry has witnessed and keeps witnessing a phenomenal change in the growth and decline of businesses. For example, there is improved technology in the oil and gas sector and ongoing discussions on the use of renewable energy in some countries. Thus, with growth and decline, most organisations are going corporate with less emphasis on interpersonal or community relationships (Stacho et al. 2019; Guru et al. 2013; Daly et al. 2003). Nevertheless, Akinyele (2012) argues that effective management of the communication process in an organisation remains the major element of an organisation for sustaining a corporate identity within its employees and external public. Through multi-dimensional communication, knowledge and ideas are shared, knowledge is developed, and innovation achieved for the successful growth of an organisation. In addition, a seamless communication process in an organisation effectively reaches all its stakeholders (both internal and external stakeholders), thereby identifying a relevant channel to be used in aggregating stakeholders' goals and mission to prevent conflict of interest (Mendelow 1981). This provides an appropriate direction for environmental scanning which has been become a continuous and relevant area for organisational processes (Robinson et al. 2020). In the case of emerging economies such as Nigeria, where the government is the major stakeholder. Accordingly, government decision and objectives guide the mode of operation in the oil and gas industry.

Thus, communication is a two-way process of informing and being informed (Knowledge production, acquisition, and sharing) because of the feedback element in effective communication process. This communication process enables reaching an agreement through the presentation of facts and expertise (McKenzie et al. 2011) at various managerial and functional levels.

Therefore, multi-dimensional communication is proposed and extended in this framework as a continuum guiding every concept of the organisational model for successful growth strategy and profitability. With communication as an active and continuous process undertaken at every stage of decision-making with the involvement of relevant stakeholders, it is assumed that appropriate decisions will be reached and communicated effectively and timely. For instance, applying competency-based recruitment and selection to attract and retain the right skill set, engagement of experts in environmental scanning. Furthermore, the study reveals that through multi-dimensional communication, the aspirations and objectives of relevant stakeholders will be revealed in advance before strategies are formulated. With these elements involved in the communication process, it is believed that oil and gas industries in emerging economies face similar challenges of strategy somersault as a result of non-fixed tenure, and government interference as a result of state ownership, but will begin to experience growth and profitability as a result of the open process guiding strategy formulation and implementation. Another finding revealed by this study is decision making, according being another addition to the Pettigrew's CCP (1991) framework.

- Decision-making

Although Pettigrew describes decision-making in an organisation as an analysis of distinct and verifiable events together with linkages between successful decisions over time (Pettigrew 1997). This study based on findings adds that decision-making should involve various relevant actors and all other stakeholders involved in the value chain system (section 3.2.1, 6.1.1.1, section 7.2.7, and Figure 12). The concept of decision-making has been argued to be a strategic capability (McKenzie et al. 2011). Decision-making, however, in Pettigrew's CCP (1991) framework is not treated as a relevant construct, it is however described as an embedded construct under the inner context of hierarchy and culture. Although it is identified in Pettigrew (1977) as an essential element for strategy formulation and described as an analysis of distinct and verifiable events with linkages between successful decisions overtime, the importance of stakeholders is not included in this definition. This means that the decision process is determined by the hierarchy. This practice is evident in this study, as decision-making takes the top-down linear approach, with the government and top management at the top. However, Nutt (1976) argues that a specific model should not define an organisation's decision-making. In support, Asrilhant et al. (2004) also found that various decision-making techniques are used to address various elements for strategic growth. Thus, both authors conclude that not one decision-making technique is suitable for addressing strategic projects, as the use of one technique leads to partial achievement. The latter author therefore suggests that decision-making should be characterised based on consideration of the various layers of the organisation (primary, managerial, and institutional), the key task of the organisation, dependencies amongst organisational units, an assessment of the adjacent layers and an assessment of environmental factors. However, this study further reveals that communication and decision-making are intertwined, being that knowledge sharing prevents the consequences of ill-informed decision, and this study highlights communication as a process of knowledge acquisition and sharing. Nevertheless, communication as a process in this study does not align with the finding of this study. This is because the communication process practiced in NNPC is top-down and not holistic, thereby preventing knowledge sharing necessary for informed decision making.

In addition, Robinson and Scott (2016) demonstrate that an organisation’s decision on strategic planning should be guided by a risk assessment of the organisation's capabilities, thus guiding the development of robust proactive strategies that will enable an organisation to perform effectively despite changes in environmental forces. To this effect, decision-making is presented in the extension of the CCP framework as a flexible and not static construct, important for the formulation and implementation of growth strategies to enhance organisational growth and profitability. Thus, an organisation's growth and profitability depend on the decision-making of the robust strategy of the organisation, and the choice of a robust strategy depends on the capabilities of the organisation and an analysis of distinct and verifiable events within linkages of context and time. Employees, units, industry environment and above all, the performance of an organisation should determine its growth strategy. The study finally adds another construct, that is, the role of human resources to the study.

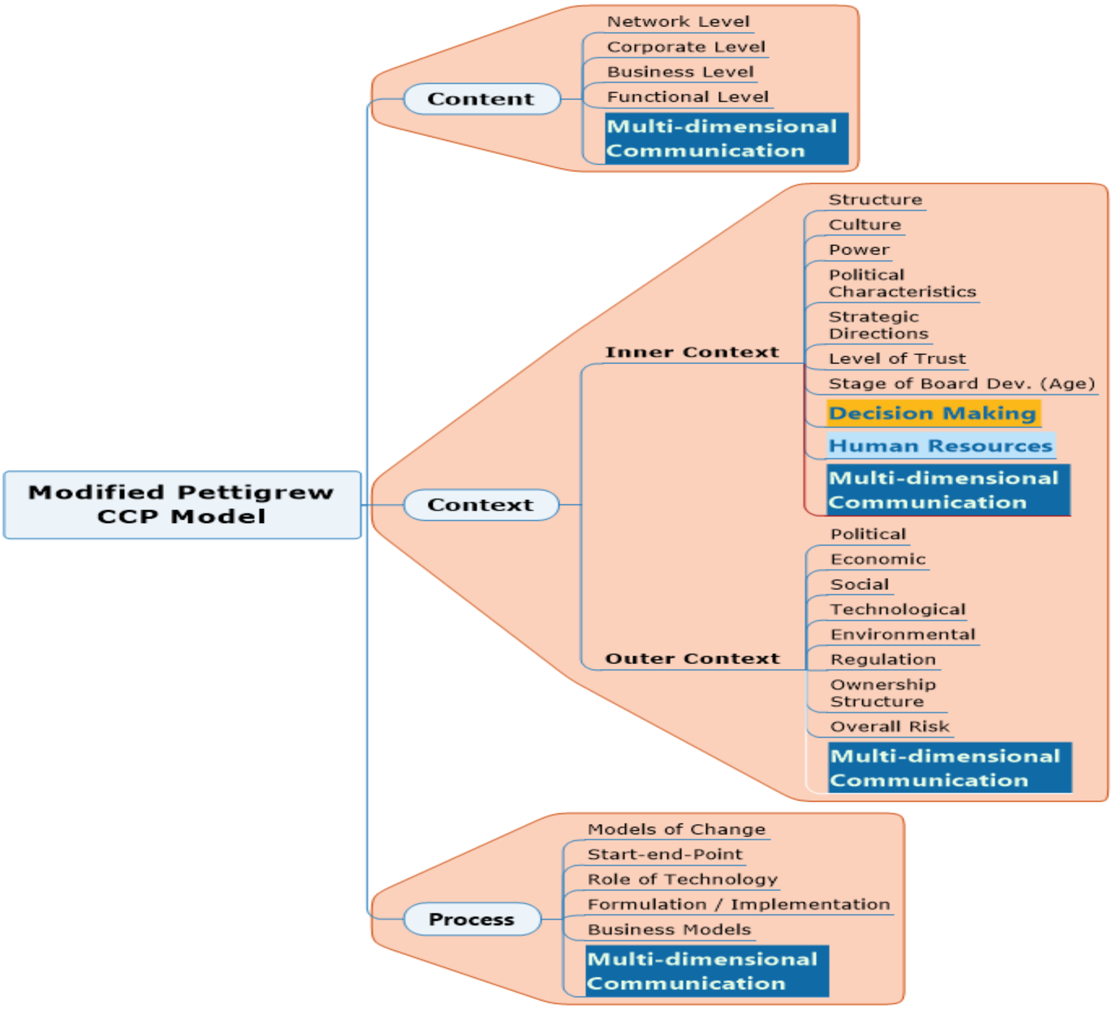
- The role of human resource

The third construct added to the internal context is "the role of human resource" (section 6.1.2.1, section 7.2.7, and Figure 12). The deployment of communication functions effectively with a well-coordinated human resource management in any organisation (Aoin 2017). The functional human resource in any organisation is responsible for ensuring the realisation of the mission, vision, goals and objectives of an organisation. This is achieved by recruiting the best talents with an organisational fit, forecasting future skill needs of an organisation and organising training or recruiting in advance for such roles, promoting and maintaining current employees, conducting appraisals, ensuring performance targets are met and are in charge of the health and safety of the employees amongst other functions. The role of HR in organisational change is not explicitly stated in the CCP framework. This becomes necessary as findings in this study reveal that the NNPC is experiencing not only skill gaps in technology but also a lag in technological and industrial innovation. This is attributed to government interference which undermines the role of the HR in recruiting and training the best talents for present and future purposes through its assessment of current and future trends in the industry. Thus, the role of HR is included under the inner context of the CCP framework as a significant construct for ensuring the formulation and implementation of growth strategies for organisational growth and profitability. As shown in literature, expertise and knowledge of subject matter are viable attributes that inform appropriate decision-making for strategic direction. Only with the recruitment of personnel with the required skills can this knowledge be shared to bring about growth and innovation, especially in technology (Ali et al. 2019). Accordingly, HR plays a significant role especially in response to environmental force, hence should not be neglected or mentioned passively, thus its addition (Figure 12).

Underpinned by this core identified themes of “communication”, “decision-making”, and “the role of HR”, the study proposed a modified framework (figure

12). Although Pettigrew recognises these themes. Nevertheless, these are dominant themes and there appear in a stronger form in this study as shown in the modified Pettigrew (1988) three-lens framework in Figure 12 below:

Figure 12: The Modified Pettigrew (1988) three-lens framework



The study enhanced the existing Context, Content and Process (CCP) in the Pettigrew (1988) theory and adapted it for the NNPC and the Nigerian oil and gas-dynamic business environment. Critically, this does not imply that this enhanced framework cannot be applied globally. It suggests and anticipates that strategic management literature will in due course integrate the contextual perspective of the emerging economy, such as Nigeria.

Extracts of the study show that the identified Context, Content and Process (CCP) in the Pettigrew (1988) theory cannot be thoroughly or absolutely employed in the world's emerging economies, particularly, Nigeria. For example, in the emerging economies, such as, Nigeria, the identified themes, such as, "ownership structure", "funding", "regulatory structure", "non-fixed tenure for the GMD, executive directors", and "top and mid-management" "technology", recruitment, and selection", and most importantly, "decision making, communication, and HR are dominant. Accordingly, the strategic management literature can incorporate how organisations are managed in in emerging economies for some rebalancing to be achieved regarding the formulation and implementation of theoretical frameworks.

8.2.2 Practical Contribution

Environmental forces

This study has been instrumental in identifying and creating awareness of the impact of environmental forces on NOCs such as NNPC operating in the emerging economies of the world. Accordingly, the findings in this study revealed that fundamental change is required in NNPC to improve the adoption of sustainable growth strategies that will lead to organisational growth and profitability. For instance, NNPC can remain government-owned or may be privatised. However, management must be strictly spearheaded by experts with the sole aim of gaining a competitive advantage rather than guided by the government and aspirations of the state, as the latter structure of ownership control has been argued to be susceptible to market failure (Thomson et al. 2017; Grait 2016). In this same vein, new ideology should govern state ownership. This is because historical procedures and processes influence the goal and objectives guiding an organisation underpinned by historical ideology and orientation. Nevertheless, there is a need for the NNPC to begin a new phase guided by constructs in the modified Pettigrew (1988) theory in this study to create change and maintain competitive advantage in this price volatile and dynamic industry in order to begin another phase of creating new positive historical ideology for strategic growth (Tordo 2011).

Evidence from the study point out that NNPC does not have clear deliberate or emergent strategy nor both but rather taking a cue from the other NOCs and IOCs due to resource inadequacy. Therefore, NNPC needs to adopt a clear and defined growth strategy to respond to the impact of environmental forces in anticipation of attaining growth strategy and profitability. Furthermore, content strategy is crucial for strategic growth in response to environmental factors. Thus, the NNPC needs to create a content strategy that takes into consideration present, past and future events. This can be done through an in-depth risk assessment of the industry, hence creating flexibility and adaptability features in the content strategy to provide an avenue for timely response to maximising opportunities and responding to threats in the industry.

The top-down decision-making process was also an environmental force affecting growth strategy. The response to environmental forces by the NNPC is mainly through bureaucracy and centralisation, and government is mainly in charge of strategy formulation and implementation. Thus, for decision making and implementation to promote growth strategies in oil and gas, some elements in the organisational structure need to be restructured alongside narrowing the diverse expectation of stakeholders. The non-linear decision-making and the holistic communication process should be adopted.

The NNPC should strike a balance between responding to the needs of the state and its business purpose. This means the non-commercial and commercial objectives should be revisited with the commercial objectives at the centre of business.

A key contribution of this research is its timeliness. This is because there is currently a motion in which the PIB is being pushed further for consideration after 17 years. This PIB seeks to overhaul the Nigeria oil and gas sector, establishment of a fiscal and regulatory framework, gas flaring policy management, assessment, imposition, and collection of oil and gas taxes (Akinola 2018; NNPC 2018; Akinrele 2016 and Nwokeji 2007). In essence, it is believed that the PIB when passed will establish regulatory and commercial institutions for effective and efficient management of the upstream and downstream of the oil and gas value chain.

8.3 Recommendations for NOCs, particularly NNPC

This study revealed blockages to the development of growth strategies in NNPC. Accordingly, the study suggested some remedies to counter the impasse by highlighting several factors such as a more rigorous contextual analysis of the external and internal environments. The study further recommends for enhancements in communications and decision-making processes to drive the development of the strategy content, and ultimately the process of implementing change. Furthermore, highlights and cognisance were given to issues regarding linear models of strategy analysis, formulation, and implementation with the intention to lead NNPC into the path of organisational growth strategy and profitability.

Accordingly, the NNPC should create a robust strategy which will be proactive rather than reactive. This implies that, based on the capabilities and performances of the organisation, strategies should be formulated to encompass more of their strengths and the current and future trends in the industry. If that is done, while changes in environmental forces continue to occur, the organisation's growth strategy will be able to accommodate these changes and respond appropriately.

In retrospect, this study recommends the following:

Recommendation

1. **Government Interference**

Having accepted the government as a critical stakeholder and owner of the NNPC, the NNPC should clearly define the role of government in the management of the corporation. This defined role should aim to promote and establish a coherent organisational structure. The organisational structure should allow predictable strategic environmental scanning and planning, support the execution of sound business judgement, reduce conflict of interest amongst the stakeholders, and reduce the risk triggered by interference of the strong political class with diverse personal interests. The NNPC should apply multi-dimensional communicate, liaise, and negotiate with the Nigerian government to limit its interference in technical decisions, financing decisions, profit re-investment decisions, and corporate governance outlook. Empirically, the positive outcome of communication, liaison and negotiation creates autonomy for making commercial decisions, formulation and implementing growth strategies common to high performing NOC (Omeje 2017; Oyewunmi and Olujobi 2016; Anifowose et al. 2016; Akinrele 2016; Inkpen and Moffett 2011; Tordo 2011; Victor et al. 2011).

2. Strategic direction

Underpinned by the key findings of this study, the NNPC should decide on a strategic direction. For instance, it should discourage the current JV growth strategy because it does not permit knowledge acquisition and sharing. Instead, the NNPC should learn to maintain a high level of independence; this independence can be achieved by utilising networking (knowledge acquisition and sharing) through an effective JV mechanism. In addition, NNPC employees should learn new skills from their partners (IOCs and NOCs) during such JVs.

3. Commercial and non-commercial objectives

NNPC should clearly define its commercial and non-commercial objectives. It is essential to carefully evaluate and limit non-commercial objectives where the non-commercial activities increase the cost of financial conflict of interest and heightened profitability risk. This can be achieved by formulating, implementing, and strictly adhering to commercial and non-commercial strategy for the corporation.

4. Regulatory Framework

Review, restructure, and monitor the legal framework governing NNPC to spur competitiveness and viability. The legal framework should promote disclosure of all financial transactions in the corporation (NNPC). For instance, cashflow analysis of the NNPC, result of oil trading, production budgets, revenue flow between the NNPC and the three tiers of government (federal government, state government, and Local Government Area), quasi-fiscal roles, amongst others. In addition, the NNPC should institute an independent audit commission with skilled professionals that maximises the publication of key data and make financial results available to all stakeholders.

Similarly, the NASS should employ effective legislative oversight that ensure responsibility for NNPC's employees and top management to address legislature's inquiry without any form of pressure that could constrain decision-making.

5. Role of Human Resources

The NNPC should establish a well-defined recruitment and selection process aimed at attracting professionals, technical experts, top management, and board members. The recruitment and selection process should be meritocratic and global best practice-driven, rather than being driven by political party affiliation or patronage.

NNPC should enhance its employee's capacity-building model by promoting training, upskilling, eLearning, accountability, and a merit-based staff promotion system. Accordingly, investment in employees is suggested to enhance employee's integrity, accountability, professionalism, and learning culture throughout the corporation.

6. Business Model or Framework

There are scholarly arguments that one model or framework is not sufficient to guide the strategic decision-making architecture of an organisation (Agnihotri 2014; Mitchell and Mitchell 2014; Cao et al. 2012; Rodriguez et al. 2005; Meyer and Nguyen 2005; Asrilhant et al. 2004). This is because organisations operate in a volatile environment, and environmental forces affecting the oil and gas industry operations are not static, somewhat affected by regular changes. Accordingly, NNPC should design a model or framework with flexible characteristics to adapt to the industry's frequent changes for sustainable growth.

The suggested flexibility in business model or framework also aligns with Pettigrew's (1992; 1977) argument that the process of strategy formulation and decision should be a continuous process of analysis of both cautious and identifiable successive decisions over time. This suggested flexibility in the business model resonates with Asrilhant et al. (2004), who advised that a specific model should not guide decision-making as this process should be determined by assessing the capabilities of the organisation and environmental factors.

7. **Collaboration**

This study revealed that NNPC is public sector organisation, and its the current practice is influenced by the political and economic development directions of the state, determined by state ownership (section 3.2.1). Accordingly, collaborative approach to strategic management in public sector must be enhanced and applied in the management of NNPC to achieve its growth strategy and profitability.

8. **Emerging debates in strategic management field**

Empirical evidence suggest that the traditional narratives of strategic management no longer fulfil the need of strategic drivers and managers of organisation, within contemporary business environment.

Accordingly, this study recommends that NNPC engage the noted differentiated approach to the field of strategic management, thereby understanding and applying these future strategic management practice. For instance, emerging topic areas such dynamic capabilities, strategic planning and strategic issues, business model innovation, strategic management in different context, corporate social responsibility, strategic planning, and strategic issues management system, that appear to be situated within the context of this study that aims to critically evaluate the impact of environmental forces on NNPC's growth strategy and profitability.

8.4. Limitations of the Study

It is significant to recognise that this research study was affected by some factors which limited the study's scope, content, and the process employed for this study. Notable limitations include:

Firstly, undertaking research with focus on growth strategy, strategic issues, oil and gas industry raises the question of confidentiality. This was further compounded by the need to deal with the strategic drivers of NNPC (top, mid-management, and NASS members). It was apparent that some of these interviewees outrightly did not want to discuss some issues such as the growth strategy of NNPC and response mechanism towards strategic issues. In fact, when thoroughly probe on some of the specific issues, the interviewees go mute. These confidentiality challenges were evident and noted during the exploratory and pilot study. Accordingly, the research question were drafted with confidentiality consideration and the researcher assured the interviewee of utmost confidentiality of all data collected. This assurance from the researcher was strengthened through the presentation of the letter of introduction / support received from the supervisory team under the University letter headed paper. Hence, data collected were encrypted, secured, and will not be made available at the conclusion of this study.

Secondly, this study uses a qualitative approach with a smaller sample consisting of top and mid-management teams, NASS members, and customers of the NNPC mainly. The industry will benefit from a study with a larger sample of employees and customers to understand the different perspective from which the environmental forces affect the oil and gas industry and make appropriate recommendations. However, this observed limitation was mitigated by selecting a quality sample size that comprehensively knowledge of NNPC strategy issues, growth strategy and understanding of the environmental forces influencing the oil and gas industry.

Finally, due to time constraint on the part of the interviewees, it was difficult to schedule key actors who have the power / influence to effect change such as top management, mid-management, NASS member for the interview. The time constraint was because of the tight schedule of these strategic drivers. For instance, several appointments were rescheduled. This rescheduling became necessary, as some of the interviewees were needed for impromptu task and meetings with either Group Managing Directors, Group Executive Director or government representatives from the presidency / NASS. Nevertheless, nine top management and four mid-management employees of NNPC were successfully interviewed in this study. This was made possible via good relationship management and follow-up calls before departure from Aberdeen.

8.5 Recommendation for Future research

This research aimed to critically evaluate the impact of environmental forces on NNPC's growth and profitability. The research intended to understand the organisation's poor performance and low profitability in order to improve the adoption of sustainable growth strategies that will lead to organisational growth and profitability.

This study makes way for future studies to find different ways of assessing the impact of environmental forces on the growth of the oil and gas industry, especially through the following identified themes / constructs captured in government interference.

Firstly, government interference was found to be a fundamental environmental force impacting the NNPC's growth strategies. For instance, the government is seen to be interfering in all the process of strategy formulation and implementation through key constructs such as decision-making, communication, and role of HR. Similarly, selection of top management and leadership appointment, the tenure of GMD, executive directors, and top and mid-management, are identified themes that affect the viability of the NNPC. Accordingly, this study proposes further study in the context of "critical evaluation of the impact of decision making, communication and role of HR on growth and profitability in the oil and gas industry, particularly amongst NOCs in the emerging economies of the world". Other notable identified themes worthy of further study in the oil and gas industry, particularly in emerging economies include: "ownership structure", "funding", "regulatory structure", and "technology". Furthermore, future study can assess the influence of content strategy in response to environmental forces, as this study has established that a significant relationship exists between content strategy and response to environmental forces.

Secondly, considering the aim of this research (section 1.3). In so doing, the research study modified the Pettigrew (1988) theory within the research context that draws from strategic management literature reviewed and synthesis of data collected from exploratory study, pilot study, and fieldwork. Accordingly, the modification proposed to the Pettigrew (1988) theory by this study may be necessary to consider and utilise in future research studies, especially in NOCs operating within the emerging economies of the world.

Thirdly, this research aimed to critically evaluate the impact of environmental forces on NNPC’s growth and profitability. Furthermore, comparative research studies in a developing country with oil and gas could complement and benefit from modifying Pettigrew's (1988) theory. This will help in re-testing of this modified Pettigrew theory in other NOCs. Consequently, the conclusion can be arrived at that may help in strengthening the modified Pettigrew (1988) theory.

Finally, the explored emerging debates in the domain of strategic management. Some of these key debates include dynamic capabilities, strategic planning and strategic issues, business model innovation, strategic management in different context corporate social responsibility, strategic planning and strategic issues management system, strategic tools, strategy implementation, strategic management in different contexts, merger and acquisitions programs, strategic alliances, sharing economy, cognitive and psychological foundations of strategy, amongst others. These emerging debates is suggested for further studies, especially in the emerging economies of the world, particularly, Nigeria.

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APPENDICES

Appendix A: Letter of Introduction from the Researcher

21/03/2018

Dear Sir/ Ma,

This study focuses on critical evaluation of strategy formulation and implementation process towards achieving growth in the oil and gas sector - A comparative Analysis between Nigeria (NNPC) and Mexico (Pemex).

The questions have been divided into six sections in line with the research aim and objectives.

Please note that this will take about 25-35 minutes of your time to complete. I shall be glad to have your expert contribution in this regard Sir.

Yours sincerely,

Isa Stephen
Doctoral Researcher

Aberdeen Business School
Robert Gordon University, Scotland
United Kingdom

Appendix B: Support Letter from Aberdeen Business School

AACSB ACCREDITED | ROBERT GORDON UNIVERSITY ABERDEEN | AMBA ACCREDITED

05/07/2018

RECEIVED
18 JUL 2018

Dr. Emmanuel Ibe Kachikwu
Honourable Minister for State,
Ministry of Petroleum Resources,
Nigerian National Petroleum Corporation,
NNPC Towers, Central Business District,
Herbert Macaulay Way,
Abuja.

Dear Dr Kachikwu

Letter of introduction in favour of Mr Stephen Sule Isa

(Student ID: 0509604)

This is formally to introduce my doctoral student, a Petroleum Technology Development Fund scholar and ask that you provide assistance with his research.

The research focuses on critical evaluation of strategy formulation and implementation process towards achieving growth in the oil and gas sector - A comparative analysis between Nigerian National Petroleum Corporation, Nigeria and Pemex (Petroleums Mexico).

All research is subject to the research ethics policy of the University and Stephen will take absolute care with any data produced to preserve anonymity.

The University would be very grateful for any assistance you can offer Mr Stephen Sule Isa in his study of this important topic.

Yours sincerely,

Ken Russell

Professor Ken Russell BSc (Hons), MBA, PhD, MIoD
Aberdeen Business School
Robert Gordon University, Scotland
Garthdee Campus
Garthdee Road
Aberdeen
AB10 7QE
Tel +44(0) 1224 263552
E: k.russell@rgu.ac.uk

05/07/2018

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Please note that this will take about 35-45 minutes of your time to complete. I shall be glad to have your expert contribution in this regard.

Yours sincerely,

Isa Stephen

Doctoral Researcher

Aberdeen Business School

Robert Gordon University, Scotland

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Appendix C: Questionnaire

Research Topic

The Impact of Environmental Forces on NNPC's Growth and Profitability: A Critical Evaluation of NNPC's Growth Strategy.

Section 1*: How and to what extent has the existing strategy that is being implemented by NNPC stimulated profitability and in turn spurred business growth within the global energy market?*

1. Are there existing growth strategies in NNPC? If yes, what are the existing growth strategies in NNPC?
2. What factors inform these existing growth strategies?
3. How are these growth strategies implemented in NNPC?
4. In what way would you say that these growth strategies impacted on profitability and spurred business growth within the global energy market?
5. Why does NNPC want to increase participation in the global energy market?

Section 2*: What factors determine the process of strategy formulation and implementation in NNPC?*

Section 2A*:* What factors influence the process of strategy formulation in NNPC?

1. What would you describe as the instigating factors towards strategy formulation in NNPC?
2. How does NNPC select the best alternatives of these strategies?
3. Who are the major players involved in setting the strategies of NNPC?
4. What are the criteria used in selecting the major players that formulate these strategies?

Section 2B*:* What factors influence the process of strategy implementation in NNPC?

5. How are these strategies implemented in the international markets?
6. Who is responsible for implementing these international strategies in NNPC? Are there strategies in place to explore new international markets? If so, can you explain how these new international strategies?

Section 3*: What is the relationship between the environmental factors and strategy formulation in the Nigerian oil and gas sector?*

1. What would you describe as the obstacles towards effective strategy formulation and implementation in NNPC?
2. Which is of these obstacles has the most impact in the process of strategy formulation and implementation in NNPC?
3. How would describe the impact of government regulations on strategy formulation and implementation in NNPC?
4. How would describe the role of government in the process of strategy formulation and implementation in NNPC?
5. How does NNPC protect itself against these obstacles that influence profitability and business growth within the global energy market?

Section 4: *How can NNPC improve on their existing strategies based on lessons learnt from other nationalized oil and gas companies in order to achieve profitability and business growth in the global energy market?*

1. Are these growth strategies published? if yes, where are there published and how often are there reviewed or reshaped?

2. How are these growth strategies measured?

3. How would you state the readiness of NNPC to adopt suitable growth strategies from other similar and successful nationalized oil and gas companies?

4. Are there perceived challenges in deploying new growth strategies that have been successfully implemented by other nationalized oil and gas companies?

5. How would you describe NNPC's resource capability to meet its strategic focus of achieving profitability and business growth in the global energy market?

Section 5: *Recruitment and Selection process in NNPC?*

The essence of this recruitment and selection questions is to enable the researcher explore the level of NNPC resource capability in view of its strategic fit.

1. How is the recruitment and selection process in NNPC conducted?

2. Are there instances where recruitment process has impacted on profitability and business growth within the global energy market?

3. Are there factors that influence the process of recruitment and selection in NNPC?

Section 6: *What is critical to the success for the acceptance of the research recommendation?*

1. Are there factors that you think may hinder the acceptance of this research recommendation?

2. What measures would you advise to be in-place before the acceptance of this research recommendation?

Demographic data

1. How long have you been working in the NNPC?

2. What is your current job position?

3. How many years have you worked on a management role in NNPC?

Appendix D: Letter of Introduction to the Honourable Minister for State, Ministry Of Petroleum Resources, Nigeria.

AACSB ACCREDITED · ROBERT GORDON UNIVERSITY ABERDEEN · AMBA ACCREDITED

05/07/2018

RECEIVED
18 JUL 2018

Dr. Emmanuel Ibe Kachikwu
Honourable Minister for State,
Ministry of Petroleum Resources,
Nigerian National Petroleum Corporation,
NNPC Towers, Central Business District,
Herbert Macaulay Way,
Abuja.

Dear Dr Kachikwu

Letter of introduction in favour of Mr Stephen Sule Isa

(Student ID: 0509604)

This is formally to introduce my doctoral student, a Petroleum Technology Development Fund scholar and ask that you provide assistance with his research.

The research focuses on critical evaluation of strategy formulation and implementation process towards achieving growth in the oil and gas sector - A comparative analysis between Nigerian National Petroleum Corporation, Nigeria and Pemex (Petroleums Mexico).

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Yours sincerely,

Ken Russell

Professor Ken Russell BSc (Hons), MBA, PhD, MIoD
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Robert Gordon University, Scotland
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Appendix E: Acknowledgement Letter from NNPC

AACSB ACCREDITED | ROBERT GORDON UNIVERSITY ABERDEEN | AMBA ACCREDITED

05/07/2018

Mrs Oyeyemi Ladipo
Group General Manager,
Human Resources Division,
Nigerian National Petroleum Corporation,
NNPC Towers, Central Business District,
Herbert Macaulay Way,
Abuja.

NIG. NAT. PET. CORP.
RECEIVED
18 .07. 2018
GGM, HR OFFICE

Dear Mrs Ladipo

Letter of introduction in favour of Mr Stephen Sule Isa

(Student ID: 0509604)

This is formally to introduce my doctoral student, a Petroleum Technology Development Fund scholar and ask that you provide assistance with his research.

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AACSB ACCREDITED | ROBERT GORDON UNIVERSITY ABERDEEN | AMBA ACCREDITED

05/07/2018

Mallam Mele Kyari
Group General Manager,
Crude Oil Marketing Division,
Nigerian National Petroleum Corporation,
NNPC Towers, Central Business District,
Herbert Macaulay Way,
Abuja.

Dear Mallam Kyari

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(Student ID: 0509604)

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AACSB ACCREDITED | TEF Gold Teaching Excellence Framework | RGU ROBERT GORDON UNIVERSITY ABERDEEN | AMBA ACCREDITED

05/07/2018

ES PTDF/GMD
05/7/2018

Dr. Emmanuel Ibe Kachikwu
Honourable Minister for State,
Ministry of Petroleum Resources,
Nigerian National Petroleum Corporation,
NNPC Towers, Central Business District,
Herbert Macaulay Way,
Abuja.

RECEIVED
18 JUL 2018
NNPC TOWER ABUJA

Dear Dr Kachikwu

Letter of introduction in favour of Mr Stephen Sule Isa

(Student ID: 0509604)

This is formally to introduce my doctoral student, a Petroleum Technology Development Fund scholar and ask that you provide assistance with his research.

The research focuses on critical evaluation of strategy formulation and implementation process towards achieving growth in the oil and gas sector - A comparative analysis between Nigerian National Petroleum Corporation, Nigeria and Pemex (Petroleums Mexico).

All research is subject to the research ethics policy of the University and Stephen will take absolute care with any data produced to preserve anonymity.

The University would be very grateful for any assistance you can offer Mr Stephen Sule Isa in his study of this important topic.

Yours sincerely,

Ken Russell

Professor Ken Russell BSc (Hons), MBA, PhD, MIoD
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Robert Gordon University, Scotland
Garthdee Campus
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AB10 7QE
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NNPC

MEMORANDUM

TO:	The Under-listed	**REF.:**	TMD/NTL/3
FROM:	GGM, HR	**DATE:**	27TH JULY, 2018

ON: LETTER OF INTRODUCTION IN FAVOUR OF MR. STEPHEN SULE ISA (Student ID: 0509604)

The above-mentioned subject matter, refers.

Attached is a letter from the Aberdeen Business School of the Robert Gordon University, Scotland, introducing Mr. Stephen Sule Isa, a PTDF-doctoral student to the Corporation for assistance with his research topic dwelling on "A comparative analysis between Nigerian National Petroleum Corporation, Nigeria and Pemex (Petroleums Mexico).

He has proposed the following staff members who can participate in his research efforts:

S/No.	Proposed Participant	ID. No.	Division/Department
1 ✓	F. S. Simpa	91363	CP&S
2 ✓	John Terry Vanduhe	17149	COMD
3 ✓	Olalekan Abiola	19422	GMD (STA)
4 ✓	Lawrence Akomas	15764	HR
5 ✓	Egbe Egor	73396	TMD

Kindly authorize the affected staff members listed in the table above to assist Mr. Isa as operationally necessary and ethically permissible.

AGBATOR, E. M. (Mrs.)
for: Group General Manager, HR

Distribution List:

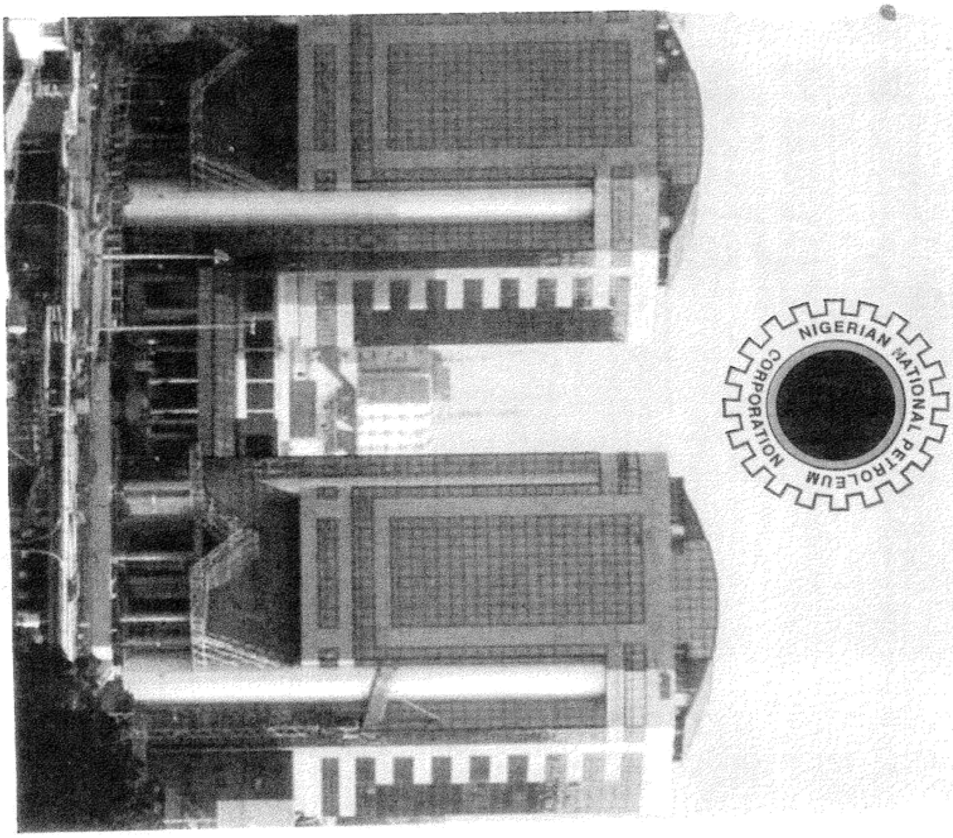
GGM, COMD
GGM, CP&S
STA, GMD
GM, HR
GM, TMD

OTHERS
James Sopo – Crude
Ahmed Tahir – Strategy
Uduezi Edwin Erahonho – T.A.Ga

CC:

GGM, HR

APPENDIX 5: NNPC STRATEGIC OBJECTIVES



Moving NNPC Forward...Together: The 12 Business Focus Areas

1 Security	Create an all-inclusive advisory council on security to address all security and host community agitations
2 New Business Models	Implement new business models for NNPC businesses that grant autonomy to SBUs and allow ABUs provide relevant direction
3 JV Cash Calls	Settle all outstanding cash call arrears and create a sustainable and long term plan for JV funding.
4 Production & Reserve Growth	Restore oil and gas production to peak levels and grow the production mix and portfolio of oil and gas reserves
5 NPDC Growth	Ensure NPDC remains the "Cash Cow" Review all contractual arrangements and terminate all bad contracts.
6 Gas Development	Leverage NNPC equity and dominance to fast track gas development for both domestic and export market
7 Refinery Upgrade & Expansion	Retool the four existing refineries for better efficiency and ensure product availability and self sufficiency
8 Renewable Energy and Frontier Exploration	Pursue business diversification and rekindle focus on renewable energy & frontier exploration services.
9 Oil & Gas Infrastructure	Repair oil and gas pipeline infrastructure and provide a robust security system (detection and deterrence) in conjunction with security agencies
10 Ventures & Common Services	Pursue profitable venture businesses and ensure value delivery by common services for the Corporation
11 Professionalism & Accountability	Entrench professionalism through transparency, accountability and respect for all
12 Staff Welfare	Ensure adequate staff welfare and motivation, training and capacity building

Appendix D: Research Student's Self Declaration (RDDECL) Form

RESEARCH STUDENT'S SELF DECLARATION *(RDDECL)* FORM

Name:	**ISA STEPHEN SULE**
Degree for which thesis is submitted:	**PHD MANAGEMENT**
Thesis title:	**"The impact of Environmental Forces on NNPC's Growth and Profitability: A Critical Evaluation of NNPC's Growth Strategy"**

1 Material submitted for award

(a) I declare I am the sole author of this thesis.

(b) I declare all verbatim extracts contained in the thesis have been identified as such and sources of information specifically acknowledged.

(c) I certify that, where necessary, I have obtained permission from the owners of third party copyrighted material to include this material in my thesis and make it available on web pages.

(d) I confirm I have undertaken an electronic plagiarism check of my thesis submission using Turnitin UK [http://www.submit.ac.uk/static_jisc/ac_uk_index.html] and a summary report is attached.

(e) *either* * I declare that no material contained in the thesis has been used in any other submission for an academic award.

or * I declare that the following material contained in the thesis formed part of a submission for the award of PhD Management *(state the award and awarding body and list the material below):*

(f) I agree that an electronic copy of the thesis be held in the Robert Gordon University Open Access Institutional Repository with full public access, that a paper copy (if available) be held in the Robert Gordon University Library, and that the Robert Gordon University supplies the British Library with a copy of the thesis in paper or electronic format for further distribution and inclusion in a central electronic repository with full public access, with the following status:

either *Release the entire thesis immediately for access worldwide

or *Restrict access to the thesis after the date of deposit of the thesis.

If restricting access, please indicate below the reason for this (delete as appropriate):

- The release of the material would prejudice substantially the commercial interests of any person.
- The material includes information that was obtained under a promise of confidentiality.
- Other. *Please specify the reason for exemption in accordance with the Freedom of Information (Scotland) Act:*

Please state the length of time the embargo is required for the thesis and provide justification for this request. Please note that, if no further application for extension to embargo has been received by the time the approved embargo ends, the thesis will be distributed

I retain the ownership rights to the copyright of my work. I retain the right to use all or part of this thesis in future works (such as books and articles).

I hereby grant to the Robert Gordon University the non-exclusive right to archive and make accessible my thesis, in whole or in part in all forms of media. I agree that, for purposes of preservation, file format migration may be carried out, should this be necessary.

2 Concurrent registration for two or more academic awards

*I declare that while registered for the Robert Gordon University's research degree, I was, with the University's specific permission, a *registered research student/*enrolled student for the following award:

PhD Management

**Delete as appropriate*

ISASTEPHENSULE

Signature of Research Student .... Date July 05, 2021.

**Signature of Principal Supervisor .... Date ....

***Signature only required if student is seeking a thesis embargo.*

This section of the form is for internal use only, for completion by the Convener of the Research Degrees Committee

Date considered by the Graduate School Board:	
Approved	
Rejected	
Reason for decision	
Signed	
Date	