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TITLE: IDENTIFYING INTERNATIONAL OIL COMPANIES (IOCs) RESPONSIBILITIES TO IMPROVE COMPETITIVENESS OF INDIGENOUS COMPANIES IN NIGERIA

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i

Table of Contents

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Abstract

Indigenous companies' participation in the Nigerian oil and gas industry has persistently been low despite their importance in generating income, employment, building local capacity and reducing poverty. This study aimed at identifying international oil companies' (IOCs) responsibilities to improve competitiveness among indigenous companies; factors that motivate IOCs to include indigenous suppliers in their value chains and also to explore the business strategies indigenous suppliers use to compete favourably in the Nigerian oil and gas industry.

The research method used for this thesis is a qualitative, exploratory cross-sectional study and the target population were eight indigenous companies (IC) consisted of owners and employees, and two IOCs operating in Delta State, Lagos State and Port-Harcourt, Nigeria.

Semi-structured interviews and review of company documents were used to collect data for this study. Interviews were conducted with ten participants. Data analysis included transcription, coding, interpreting and reporting the themes, member checking was also used to strengthen the trustworthiness of the interpretations. Purposive sampling involving both criterion and convenience sampling were used to select the participants. The data were analyzed through an interpretive paradigm using the Ritchie and Spencer's (1994) framework analysis.

Findings from the study confirm that local policies, local infrastructure, local environment, local capabilities of indigenous companies, actors and linkages are important strategies to improve company profitability and economy growth. Findings also showed that IOCs should be involved in the training of local suppliers to enable them have a globally accepted standard to do business. Furthermore, policy makers must design coherent policies that make it easier for indigenous firms to operate successfully.

List of Figures

List of Tables

Glossary

AIOC	Anglo-Iranian Oil Company
CSR	Corporate social responsibility
FDI	Foreign direct investment
IC	Indigenous companies
IOCs	International oil companies
LC	Local Content
LCPs	Local content policies
NCDMB	Nigerian Content Development and Monitoring Board
NOCs	National Oil Companies
NiPEX	Nigerian Petroleum Exchange.
OEMs	Equipment Manufacturers
PETAN	Petroleum Technology Association of Nigeria
PSC	Production sharing contract
SMEs	Small and Mediums scale enterprises
TRIM	Trade-related investment measure
UNCTAD	United Nations conference on trade and development

CHAPTER 1: INTRODUCTION

Extraction of oil and gas, prudent however, has significant social, political, economic and environmental implications for society. In the modern world, Hydrocarbon extraction has become integral to every aspect of life as suggested by Bridge and Le Billon. (2013). In 1956, Nigeria announced the discovery of commercial quantities of oil and gas at Oloibiri in the Niger Delta after exploration for about half a century. Shell-BP made the discovery. Nigeria started production in 1958 with its first oil field that came up on stream producing 5,100 barrels per day.

Necessary mechanisms must be in place so as to overcome scourges that might arise with the discovery of oil in Nigeria. Thus, various policies are instituted to capture more gains from Nigeria's oil and gas sector and this includes the Petroleum (Local Content Policy).

In order to address challenges in the oil and gas sector, LC policy was implemented in Nigeria in 2001 and was passed into law 10 years later. A regulatory act known as the Nigerian Oil and Gas Industry Content Development Act was introduced in 2010 as proposed by Ovadia (2013), cited in Abdulkabir et al., 2016. The policy is designed to build the capacity of indigenous firms and to provide more opportunities for participation in business. The targets for LC policy in increasing local content development were set progressively with 45% local content in 2007, 70% in 2010 (Ihua et al., 2011, Ariweriokuma, 2009 cited in Abdulkabir et al., 2016.), and more than 80% by 2020 (Bakare, 2011 cited in Abdulkabir et al., 2016).

The policy is also expected to increase backward linkages in terms of procurement and utilization of locally produced input materials, creating more employment opportunities for the locals (Esteves et al., 2013, Ihua et al., 2011, United Nations Conference On Trade And Development (UNCTAD) / CALAG, 2006, Ariweriokuma, 2009 cited in Abdulkabir et al., 2016). Supply of input materials to the commodity sector that links the sector to other sectors in the local economy is backward linkages. On the other hand, activities that involve processing of the sector's output prior to export through are forward linkages, for example in the oil and gas industry, the establishment of refineries, petrochemical industry, and production of fertilizers (Tordo et al., 2013.).

Local content policy (LCP) aims to promote Nigerians' participation at every level in the oil and gas industry value chain. Since local content acts is a broad subject, the write choose to study a small part of LCA. Thus, this Masters' thesis explores the ways in which international

oil companies' (IOCs) responsibilities improve competitiveness of indigenous companies participating in the oil and gas industry in Nigeria, taking into consideration business strategies indigenous suppliers use to compete favourably in the Nigerian oil and gas industry, how do the IOCs and foreign suppliers connect with indigenous companies in their supply chain to build adaptive activity systems and what motivates the IOCs to involve indigenous companies in their value chains.

1.1 Background

The local content subject is now more important in developing countries to be used as a ladder for economic development and bring more assets than just oil revenues and taxes. (Mireftekhari, 2013). Developing African countries have recently introduced a host of local content (LC) requirements and rules throughout their extractive industries (Morris et al., 2012; Hansen et al, 2015). These local content requirements mirror a significant change in policy toward more decisive approach to foreign extractive investors across Africa (UNCTAD, 2013). LC is not only seen as a mechanism for local job and income generation, but also progressively as a mechanism of industrial development and socio-economic transformation (Morris et al., 2012; Buur et al., 2013). Where international development banks and donors previously were opposing mandatory LC requirements, they now accept that LC interventions, designed in the right way, will contribute to African economic and industrial development (Buur et al., 2013; World Bank, 2016)

The first local content agreement came into play in 1933 between The Iranian Government and Anglo-Iranian Oil Company (AIOC), when Reza Shah Pahlavi -king of Iran- asked for local content requirement in the oil explorations. In the 1933 agreement with Reza Shah, AIOC promised to give labourers better pay, more chance for advancement, school constructions, hospitals, roads and telephone system but not all these were implemented (Kinzer, 2008). However; this made the training of new generation of Iranian managers, engineers and technicians at the Abadan Institute of Technology (the first Petroleum University) possible (Vismeh, 2011). In the early 1970s local content policies were introduced in the North Sea which ranged from restrictions on imports to the creation of National Oil Companies (NOCs) (Tordo et al., 2011).

According to Hansen et al. (2016), the vast natural resources endowments in Africa has in recent years surfaced as key drivers of African development. As suggested by (Ghazvinian, 2008), over 20 billion USD has been invested in petroleum exploration and production

activities in Africa by multinational corporations (MNCs) since the 1990s. Companies such as Shell, Total, and Chevron have spent a predicted 15%, 30%, and 35% respectively of their international exploration and production budgets in Africa as described by (Ghazvinian, 2008). As proposed by (Bridge and Le Billon, 2013; Ghazvinian, 2008; KPMG, 2013), this trend is increasing although Africa accounts for less than 10% of the world's proven oil reserves, shadowed by the Persian Gulf America's oil imports were diversified urgently due to the 2001 September 11th terrorist attacks in the US and the protracted Middle Eastern conflicts (De Oliveira, 2007; McCaskie, 2008).

Despite the abundance of natural resources and oil reserves in African countries, most of these countries are still economically backward. This thesis weighs in on oil and gas exploration in a developing country like Nigeria and in comparison, discusses conceptual understanding of local content in Ghana and Tanzania in Chapter two.

1.2 International oil and gas outlook as well as relative interests in Africa

It has been estimated internationally that 1.3 trillion barrels of oil have been extracted in the past 150 years. International oil reserves have also grown with about 38% standing at 1.4 barrels, (Bridge and Le Billon, 2013). International oil reserves increase can be attributed to the enhancement of society's geological knowledge, technological advancement, various political factors as well as the economics of production (Bridge and Le Billon, 2013; De Oliveira, 2007; Ovadia, 2015).

Current trends in the global oil and gas outlook are governed by three significant changes thus;

- Conventional oil reserves, which were driving economic growth in the twentieth century essentially, are becoming progressively limited.
- The quality of reserves is changing, with light crudes now being heavily reduced.
- In response to the search for new reserves, the frontier of extraction has also changed.

This change has taken exploratory activities to the arctic and ultra-deepwater environments offshore. Oil and gas exploration in offshore environments has increased in the last decade, with the Gulf of Mexico, Brazil, and the Gulf of Guinea all seeing the most activity (Bridge and Le Billon, 2013).

In terms of quality, crude oil from Africa, is considered 'light and sweet', and is easier and not costly to refine (Bridge and Le Billon, 2013; Ghazvinian, 2008; McCaskie, 2008). For

example, crude oil from Nigeria is especially adapted for use in US refineries making Nigeria the fifth-largest exporter of crude oil to the US (Ellis, 2003). Africa is being surrounded by water, thereby offering an economical means of transporting crude oil to major international markets from the Gulf of Guinea (Bridge and Le Billon, 2013; Ghazvinian, 2008).

As described by (Bridge and Le Billon, 2013; Ghazvinian, 2008), contractual environment in African States are more favourable when compared to what is obtained in the Persian Gulf. The state-owned Saudi Aramco has a monopoly over the exploration, production and distribution of oil in Saudi Arabia (ibid). As termed by De Oliveira (2007), most African countries, including Nigeria, operate under the so-called Production-Sharing Agreements (PSAs2), according to which MNCs assume the up-front costs of exploration and production. MNCs is particularly the beneficiary, considering the advancement in technology which has developed oil and gas exploration from a 'hit or miss' scenario into a much more precise activity.

Lastly, none of the oil-producing countries of sub-Saharan Africa belong to OPEC except Nigeria and Angola, who joined OPEC in 1971 and 2007 respectively. Since the 1970s, OPEC put rigid limits on output to artificially maintain high oil prices. However, the current fall in oil prices, with Brent crude selling as low as US$30.14 on 11th January 2016 casts doubt on the price controlling 'powers' of OPEC. The fact that the majority of the recent oil discoveries in sub-Saharan Africa have been offshore also makes the continent a favourable environment for oil exploration and production. As recommended by (Ghazvinian, 2008), the above explanation is particularly true for multinational companies (MNCs) and western governments who have had to contend with violent conflicts in the Middle East and insurgency in the Niger Delta Region in Nigeria, for instance; with their oil and gas installations offshore, production can continue with limited interruptions and little likelihood of sabotage in conflict situations. Indeed, almost every African country is prospecting for oil, with the Gulf of Guinea being described as one of 'the world's fastest-growing sources of energy' (ibid).

1.3 Research Problem

Many Scholars view local content from the perspective of 'value addition' (Obuaya 2005, as cited in Ihua, U. B., 2010; Nwapi, C. 2015). Local content in the supply chain of oil and gas industry has emerged as an area of interest in developing countries (ibid). This is because firstly, the oil and gas industry is a capital intensive industry often dominated by foreign

multinationals. Secondly, it also offers opportunities for local industry to emerge based on local entrepreneurs. Particularly so, as the governments come up with policies for industrialisation to develop forward and backward linkages in the resource industry (ibid).

While this research (Local content and struggling suppliers: A network analysis of Nigerian oil and gas industry) by Vaaland et al., (2012) has paid attention to how local content can be enhanced in the oil and gas industry in a developing country like Nigeria, it has not looked at how Local Content Acts can be used as a strategy to drive competitiveness in local companies participating in the oil and gas sector. According to Vaaland et al., (2012) there is need for further research to investigate how LCAs affect the competitiveness of indigenous oil and gas companies.

Thus; this study is designed to explore how international oil companies' (IOCs) responsibility is impacting competitive advantage of indigenous companies participating in the oil and gas industry in Nigeria. There are relevant local content strategies and solutions, which project managers can use during the project phases to decrease drawbacks as well as project risk. However, in the specific context of developing countries such as Nigeria, there are challenges such as the socio-political and economic environment, human capital and unrealistic expectations as suggested by Crittenden and Crittenden, (2012). While these strategies can be slightly generalized, they require specificity and flexibility of application for each developing country. In light of this the following research problem and research questions suffice:

Identifying international oil companies (IOCs) responsibilities to improve competitiveness of indigenous companies in Nigeria.

To solve the main research problem, the following research questions will be looked into:

1. What business strategies do indigenous suppliers use to compete favourably in the Nigerian oil and gas industry?

2. How do the IOCs and foreign suppliers connect with indigenous companies in their supply chain to build adaptive activity systems?

3. What motivates the IOCs to include indigenous companies in their value chains?

1.4. Objectives of the study

The aim of this study is to explore how international oil companies (IOCs) responsibilities improve competitiveness of indigenous companies in Nigeria. The target population consisted of eight indigenous companies and two IOCs operating in Delta State, Lagos State and Port-Harcourt, Nigeria which is listed on the Nigerian Petroleum Exchange (NiPEX). I used semi-structured interviews and review of company documents to collect data for this study. The indications for a real civil change include the possibility for firms to contribute their best practices and strategies to enhance profitability and growth, reduce poverty, generate employment and enhance standards of living. Increased profitability may lead to the prosperity of indigenous companies while benefitting employees, families, and communities at large.

The data collected will then be used to have participants answer two research questions that relate to the research problem. The first research question focuses on the strategies indigenous suppliers use to compete favourably in the Nigerian oil and gas industry. The second question focuses on how IOCs or foreign suppliers connect their enterprise with the enterprise from the indigenous supplier so as to build adequate activity system and factors that motivate IOCs to involve indigenous companies in their value chains. Since the discovery of oil, countries like Nigeria is faced with the dilemma of how to manage natural resources, eradicate poverty and maintain economic growth due to misguidance in government, political issues and inadequate infrastructures. Adams et al., (as cited in Vaaland et al., 2012).

1.5 Definition of key terms

Definitions adopted by researchers in different fields of study are not uniform and, therefore, terms are open to different interpretations. The following key terms are defined as they are expected to be used in this research:

Business strategy: The means where by an organization sets out to achieve its desired goals and to improve business performance. How the business leaders will compete in the marketplace, maximize competitive advantage, and minimize competitive disadvantage are the details contained in business strategy (Alsudiri, Al-Karaghouli, &Eldabi, 2013).

Indigenous suppliers: This is giving preference to locally owned companies to supplies goods or services. A supplier may be distinguished from a contractor or subcontractor, who

commonly adds specialized input to deliverables. Suppliers are also called vendor (Business Dictionary, nd).

Competitive advantage: As given by Barney, (1991), competitive advantage is the implementation of a value creation strategy that is not simultaneously implemented by any current or potential competitors.

IOCs: This is the acronym of International Oil Company and nominates the Oil & Gas companies which are privately owned and operate globally. IOCs operating in Nigeria are ExxonMobil, ChevronTexaco, Equinor, Shell, Total, ConocoPhillips etc.

External environment: External environment according to Guo & Cao (2014) has to do with industrial conditions, entities, events, trends, and factors faced by an organization that influence its activities and choices. Company relates to customers, competitors, and regulatory bodies within the external environment (Hulbert, Gilmore & Carson, 2013). An industry's opportunities and risks as well as influencing the life, growth and the development of the firm are determine by external factors.

Resources: As proposed by (Barney,1991), resources are assets, capabilities, attributes, organizational processes, information and knowledge controlled by an organization to enable employees to develop and implement strategies to improve its efficiency and effectiveness. Barney (1991), Franco & Haase, (2013) say two main types of resources are intangible knowledge-based resources, and tangible property-based resources such physical and financial resources.

Small and medium enterprises (SMEs): From statistics, small to medium enterprises (SMEs) make up the vast majority of businesses in most countries (Susan 2018). These are legally independent companies that employ less than a given number of employees depending on the country (OECD, 2005). SMEs can employ 250 employees according to the European Union (EU). Notwithstanding, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees (ibid).

1.6. Assumptions

Assumptions are beliefs that are essential to the research but are not verifiable (Simon, & Goes, 2011). As the researcher, I assumed the participants in the study had sufficient understanding of their business classification as SMEs and IOCs, their operating environment, and their capabilities and resources. I also assumed that participants would give truthful and

accurate answers to the interview questions. Finally, I assumed that the geographical areas were large enough to provide good data for this research.

1.7. Delimitations

Delimitation refers to the planned and justified scope of the study beyond which generalisation of the outcome was not intended. In other words delimitations are factors within a research that can limit its scope and define its boundaries as described by (Simon & Goes, 2011). Specific choices made by a researcher such as choice of research questions, theoretical framework, and participants resulted from delimitations. This study establishes two important delimitations:

i. The study explores international oil companies (IOCs) responsibilities to improve competitiveness of indigenous companies (SMEs) in Nigeria.
ii. The study is limited to eight indigenous companies and two IOCs operating in Nigeria. These indigenous companies provide services to oil companies in Delta State, Lagos State and Port-Harcourt in Nigeria. Both SMEs owners and IOCs participated in the study.

1.8. The Structure of thesis

This chapter provides a summary of the entire study. The research report is structured and presented in the following 6 chapters:

Chapter 1: Introduction. This lays the foundation of the study including an explanation of the research problem and the thesis scope and objectives

Chapter 2: Literature review. This chapter reviews existing literature on local content and also puts into viewpoint the theoretical and empirical considerations involving relevant strategies for successful International oil and gas exploration in developing countries. It aligns the study with existing theories in the discipline of local content policy and identifies relevant themes.

Chapter 3: Research design and methodology. This presents a detailed description of how the research and analysis is to be conducted. The chosen methodologies and the reason for choosing them will be described. The way data were gathered is also written in detail also the reliability and validity of data is going to be described. That is to say, this chapter presents and justifies the research design and strategy, techniques for data collection, presentation and analysis.

Chapter 4: Presentation of the data. This presents results of the study in different formats such as tables, verbatim statements and a narrative as they relate to the findings.

Chapter 5: Analysis of the data. This analyses the results as they relate to the literature review and addresses the research problem.

Chapter 6: Conclusions. This chapter gives, limitations of the study, observations and conclusion of the research findings, and suggests areas of future research.

CHAPTER 2: Literature Review

2.1 Introduction

This chapter is a literature review to examine the literature on local content in Africa. Thus, a review of a cross-section of literature on local content acts is offered here. There is no doubt; LCPs have gained prominence both in academia and policy spheres, there is no single accepted definition of 'local content' in LCPs. This can be attributed to the multidimensional nature of LCPs, with varied scope and depth as well as its application in varied sectors (Ramdoo, 2015). Regardless of the sector, one of the most critical questions that policy makers have to address with regards to LCPs is exactly what constitutes 'local' (Ramdoo, 2015). Local content development in IOCs is a new concept, which has drawn academic attention especially in developing oil nations. During the past few years academic papers have concentrated on local content in African countries such as Nigeria, Tanzania, Mozambique, and Ghana. For example "The Economics and Politics of Local Content in African Extractives: Lessons from Tanzania, Uganda and Mozambique by Michael et al., (2016) & Local content and struggling suppliers: A network analysis of Nigerian oil and gas industry by Vaaland et al., (2012)."

Ferguson (2005) explored the disconnection between the extractive sector and African societies then concludes that 'capital "hops" over "unusable Africa," alighting only in mineral-rich enclaves is starkly disconnected from their national societies' (Ferguson, 2005, p. 380). According to Warner (2007); and to view local content from the perspective of ''community content'; says that 'ultimately, community content is about realising a competitive edge for an oil and gas development company in the opinion of both the local population and the country's guardians of economic policy.'' He also observed two distinct policy strategies for achieving higher local content: firstly, where the state requires international oil companies to give greater preference to those nationals and secondly, national suppliers who can compete internationally on cost, quality, safety and timeliness i.e. what can be termed local content participation.

Many of the academic literature on local content adopt an economic prospect. This prospect examines whether or how local content contributes to economic and industrial development, for instance, by generating local income, increasing efficiency and productivity of local industry, and/or promoting industrial restructuring. An alternative prospect focuses on the

political processes in which local content is ingrained. Below is comparison between the economic and political prospects on local content.

2.2 Background on the economics and politics of local content

2.2.1 Economic prospect on local content

In order to meet up with the growing interests in the parts of local content, a bourgeoning economic literature has emerged with focus on the conditions and effects of local content in African extractives (Ado, 2013; Amendolaigne et al., 2013; Hansen, 2014; Kazzazi and Nouri, 2012; Morrissey, 2012; UNCTAD, 2010; Warner, 2010 cited in Hansen et al., 2016). Economists of a more approved persuasion tend to view local content measures as welfare reducing as they distort trade and foreign direct investment (FDI), (Grossman, 1981). For instance, Warner (2010) argues that local content rules may significantly affect MNCs' net present value (NPV) calculation and internal rate of return (IRR) and that local content requirement eventually may reduce overall trade and FDI.

It is further argued that local content requirements may be harmful to the local investment climate as they fundamentally strengthen the competitiveness of domestic players over foreign players, thus potentially leading to allocative inefficiencies as termed by Warner (2010). However, economists of a heterodox persuasion tend to accept that local content policy, when designed the right way, may support local income generation, productivity improvements and industrial restructuring (Altenburg, 2011; Chang, 2002). The economists pointed to the fact that most advanced countries including the USA and Germany, while in the early stages of economic development, massively employed local content measures to promote industrial development this is as proposed by Chang, (2002). Ado (2013) gave a recap on the argument in favour of local content:

- Protecting infant industry;
- Curbing market power of foreign industry vis-a-vis local industry;
- Providing social compensation to local communities suffering the externalities of production; and
- Protecting strategic sectors. Others add that the local content measures may increase the likelihood of inter- and intra-industry productivity and market access spillovers on the local economy (Blomstrøm and Kokko, 2001; Blomstrom et al. 2003; Morrissey, 2012). However, from an economic prospect, it is also clear that local content will not contribute to economic development unless certain conditions are met, these include:

(a). Clear policies; (b). The right institutions; (c). Absorptive capacity in local industry; (d). Multinational company's (MNC) willingness/ability to outsource

2.2.1.1 Clear policies

Local content rules can be demanding and should therefore be introduced in a transparent and gradual manner to allow foreign firms to adapt and local absorptive capacity to expand (Tordo et al., 2013). Moreover, rules should treat investors equally to avoid twist competition. They should also be introduced gradually to enable private sector to accommodate. In order to avoid vaguely formulated policies that will require excessive administrative intervention, it is also important that local content rules are transparent and clear. Local content rules may carry large hidden costs, for example, in the form of foregone investments, or visible costs such as tax exemptions and subsidies. It is therefore vital that local content rules are subjected to a rigorous cost benefit analysis (Ibid).

2.2.1.2 Right institutions

A contract-based market exchange between MNCs and local firms is what economic perspective fundamentally assumes that local content arises from. To be able to facilitate and support such contracts to a success, this exchange requires the right institutions (North, 1990; Rodrik, 2004). This includes institutions that can reduce information asymmetries (for example providing information about the quality and skills of local suppliers), reduce monitoring costs (that is stipulating transparent accounting and reporting rules) and reduce costs of contract enforcement (for instance securing efficient courts and judicial procedures). If these kinds of institutions are not in place, local content contracts are less likely to be made. Moreover, where institutional environments are uncertain, the valve will be opened for rent-seeking activities by firms, administrators and politicians involved, and these will result in loss of welfare for the society.

2.2.1.3 Absorptive capacity in local industry

According to (Diyamett et al., 2011; Hufbauer and Schott, 2013), from economic prospect, it is not enough to have the right policies and the right institutions in place. Local content will not happen, if there is no local industry to pick up the opportunities. Rather than developing the technological, commercial, organizational and absorptive capacity of the local industry and/or the local business environment required for local content, local content policies often focus on the requirements of foreign investors. (Hufbauer and Schott, 2013). Therefore, to

provide measures for developing local industrial capacity, local content policy needs to take into account the actual state of local industry.

2.2.1.4 MNC willingness and ability to outsource

Depending on the sourcing strategies, value chain configurations and corporate social responsibilities (CSR) strategies, MNCs will, to some extent, outsource activities to local firms (Hansen, 2014). While others may be reluctant to cease control of value chain activities, Some MNCs will actively pursue local content as an integral part of their strategy. Although extractive MNCs' growing tendency to outsource functions and activities (Morris et al., 2011a; 2011b) cited in Michael et al., (2016) open new opportunities for local suppliers and service providers, these opportunities are severely constrained by MNCs' increasingly stringent technical as well as safety, environmental and delivery standards imposed on suppliers and service providers (ibid). MNCs will prefer to procure from their global key suppliers and service providers rather than from local entities because of these stringent standards.

2.2.2 Political prospect on local content

The economic prospect focuses on economic development effects of local content and the institutional and governance conditions necessary to achieve local content as discussed earlier. Nevertheless, an alternative prospect views local content through the lens of politics. It focuses on the processes of policy-making surrounding local content, and the relationship between political and economic elites (See Altenburg, 2011; Altenburg and Melia, 2014; Khan, 2010; Whitfield et al., 2015 cited in Hansen et al., 2016).

While there are several political approaches and theories that could be relevant to analyse the politics of local content, instead focusing on a 'political settlement' approach which in analyses of other productive sectors has proved fruitful and effective for understanding political economy outcomes in sub-Sahara Africa proposed by (Whitfield et al., 2015; cited in Hansen et al. 2016).

A political settlement approach as promulgated by Whitfield et al. (2015) cited in Hansen et al., (2016) focuses on two cardinal axes of analysis. The first axis is the structure of the ruling coalition supporting the elite in power and how contested it is internally and in relation to excluded factions. The second axis is the relative political influence and capabilities of domestic capitalists. Stable political settlements distribute rents and access to resources among actors in ways that do not threaten political stability and encourage violence by

excluding powerful factions. Ruling coalition's in African countries are typically disintegrated and are striving to maintain power through allocation of rents organized through both the formal state budget and informal means. For regime survival as system maintenance and consolidation depends, to a large extent, on its ability to distribute rents to constituencies, thus, the appropriation and allocation of rents is usually very essential.

Political elite's most important sources of funding and revenues are generated in and around politically protected monopolies; these are from the largest firms related to the banking, telecom and trader import/export sectors. What sets most African countries apart from more successful developing countries is the lack of domestic firms who can formally fund the political system through taxes; hence Rents from productive sectors are especially important (ibid). In such contexts, for sustaining political settlements, rent distribution from productive activities is absolutely essential. Rents are used by patrons to satisfy and reward clients, thereby maintaining power (ibid). In contrast to the classical public choice notion of rents, which views rents as 'unproductive' (Bhagwati, 1982; Krueger, 1974), rents are in this understanding productive in the sense that they contribute to political stability (Khan, 2000a; North et al., 2009). When the formal economy cannot sustain the settlements required by ruling factions to maintain political power, this is an implication that the total production and productivity is extremely low. Hence, political settlements must be achieved through other means, for example, by subjecting the productive sector to political purposes by extracting rents.

In connection to the local content discussion precisely, for maintaining legitimacy and building support in various ways, the political settlement theory suggests that elites may use local content policies. For instance, to generate political benefits, consolidate the authority of ruling elites and ensure their continued position of power, jobs created at local companies and in local communities become an asset that can be used to achieve this (see Buur et al., 2013). Local content easily results in the promotion of inefficient and inexperienced but politically well-connected firms; this is due to the weak position of the local capitalist class. Local content will only work if it can be used by ruling elites, assisted by bureaucrats loyal to them, as an instrument to maintain power by awarding contracts, jobs and opportunities to those financing the ruling coalitions. Accordingly, local content policies will only be adopted to the extent that they broaden the space for ruling elites to access and redistribute benefits so as to maintain and deepen ruling coalitions. If local content raises the risk of promoting the rise of competing power centres, this can be resisted by ruling elites. See Table 1 below:

Table 1: Two perspectives on local content adapted from Hansen et al., (2016)

	Economic perspective	Political perspective
The role of local content	▪ Improving efficiency (allocative and productive efficiency) ▪ Facilitating productivity and market access spillovers on related industries ▪ Increasing welfare (creating jobs, income and activity)	▪ Contributing to political settlement and stability ▪ Providing opportunities for political elites to allocate rents to clients
Conditions for local content to work	▪ Clear policies ▪ Right institutions ▪ Absorptive capacity in local industry ▪ MNC willingness/ability to outsource	▪ Rent appropriation and distribution potential ▪ Contribution to maintenance of ruling coalitions ▪ Prevent competing power centres from emerging

2.3 Theoretical and Conceptual understanding of Local Content

This section puts into viewpoint the theoretical and empirical considerations involving relevant strategies for successful International oil and gas exploration in developing countries. It aligns the study with existing theories in the discipline of local content strategy and identifies relevant themes.

2.3.1 Definitions of Local Content

According to Nigeria National Petroleum Corporation (NNPC) annual report, the term Local Content (LC), suitably called 'Nigerian Content' is defined by the Nigeria National Petroleum

Corporation as 'The quantum composite value added or created in the Nigerian economy through the utilization of Nigerian human and material resources for the provision of goods and services to the petroleum industry' (NNPC Website, 2008). While it can be contended that this seems more of a textbook definition and not practical; local content was viewed from the perspective of "value addition" by Tony Obuaya who is one of the leading voices in the clamour for higher local content. He defines local content in two ways: (i) ''as a set of deliberate orientation and actions to build domestic capacity relevant for service and product delivery comparable within that industry'' and (ii) ''as an opportunity to locally build a sustainable culture of service quality and capabilities exceeding customers expectations and comparable to international standards through key local personnel and management'' (Obuaya, 2005).

These definitions tend to be more precise, with emphasis placed on certain key indices, which provide insights into how the local content policy can be measured and examined as an academic concept. This position was corroborated by the Chairman of Nigeria's House of Representatives Committee on Petroleum (Upstream), Hon. Tam Brisibe, quoted in the media to have stated that "Local content means different things to different people…the common denominator is value addition in the country" (Business Day, 2008). The concept of local content is neither new nor restricted to Nigeria, as it has for long been operated in several other oil-producing countries.

Local content is viewed from the angle of 'community content' according to Warner (2007), stating that 'basically, community content is about realising a competitive advantage for an oil and gas development company in the view of both the local population and the country's guardians of economic policy.' He observed two distinct policy strategies for achieving higher local content vis-à-vis: firstly, where the state requires international oil companies to give greater preference to those nationals and national suppliers who can compete internationally on cost, quality, safety and timeliness i.e. what can be termed local content participation.

As proposed by Iba (2008), the idea of Local Content Acts (LCAs) came to play because Federal Government (FG) wants to indigenize the oil and gas sector as much as possible. This policy is to enable government check the huge capital flights that go with the award of contracts to foreign firms, and for the policy to ensure the development of local human expertise. Thus, local content acts refers to adapted knowledge of a community locally owned

that aimed at supporting efforts of the poor in developing countries to create and exchange useful potential wealth generating projects. (Iba 2008, as cited in Adebayo 2009.)

Local content policy of the federal government mandate all multinational oil firms to ensure that 25% of all its projects are handled by qualified local firms. LC as practiced in the USA stipulates that 90% of the components of any product, especially motor cars, must be made in the USA. From these views, one can say in summary that LC has to do with the indigenization policy of the FG, which encourages that a particular product should obtain domestically a specified minimum percentage of their basic input as proposed by (Kisambira 1987, cited in Adebayo 2009).

2.3.2 Local content in the oil and gas sector

Local content policies (LCPs) are set up by governments to generate benefits from a particular sector in order to benefit local economies beyond simply the financial advantages from the resource revenue. The use of LCPs to promote broad-based economic development first emerged in the North Sea in the 1970s (Tordo et al., 2013.). According to Dobbs et al. (2013), over 90% of resource-driven economies now have some form of local content regulations in place. The two prominent oil producers in Africa, Angola and Nigeria, implemented LCPs in their oil industries in 2002 and 2010 respectively, but both countries have been into oil production since the mid-1950s (Ovadia, 2014). Ghana in comparison implemented the LCPs in 2013, three years after they began to produce oil. The pace at which Ghana's LCP was passed shows the urgency attached to LCPs as a measure to ensure the running down of the country's oil wealth. LCPs are aimed at facilitating forward, backward or consumption linkages as a means of stimulating economic development (Ovadia, 2015). LCPs are useful in several sectors but have gained prominence in the extractive industries due to their disposition to operate as isle that are in many ways separate from national economies (Ackah-Baidoo, 2012; Ferguson, 2005, 2006).

In the mining sector of Ghana, for instance, Newmont Mining Corporation priorities 'local local' companies in their local content policy according to (Ramdoo, 2015, p. 2). This statement means that priority is given to those Ghanaian businesses that are situated within the vicinity of their mining operation. Due to the fuzzy nature of the word 'local', Nigeria's local content policy is referred to as complex definitions of the word (International Finance Corporation, 2011).

LCPs have been viewed by critics as protectionist measures that give preferential treatment to natives (Hufbauer and Schott, 2013). In African economies however, most local firms do not have the same capacity as MNCs. An often-cited challenge to local participation in the petroleum sector is the lack of domestic capacity in terms of skilled labour, capital and technology (Karl, 2007). The capital intensity of the oil and gas sector means that it can be rare or not even possible for individuals or small-scale firms to engage in extractive activities.

This contrasts with mineral extraction, such as gold mining, where small-scale artisanal operators are much more common (Banchirigah, 2008 on small scale mining in Ghana). These limitations form the rationale why LCPs backed by capacity development programs are needed in order to foster extensive local participation in the petroleum sector. Localising the petroleum sector supply chain can produce varied and sometimes counterproductive outcomes, such as reduced operational cost for MNCs, increased value capture by local firms or legitimising elites' capture of resource rent (Ovadia, 2012).

2.3.3 Conceptual understanding of Local Content in three African Countries

This section will put into considerations conceptual understanding of local content in Nigeria, Ghana and Tanzania.

2.3.3.1 Local Content Policy in Nigeria

In 1971, the local content policy action started through the establishment of the Nigerian National Oil Corporation (NOC). Nigerian National Oil Corporation was established as a vehicle for the promotion of Nigeria's indigenization policy in the petroleum sector. In 1977, it became Nigerian National Petroleum Corporation (NNPC) through NOC's merger with the petroleum ministry. Through the acquisition of interests in the operations of the international oil companies, Nigerian National Petroleum Corporation flagged off the actual local content initiative. The interests grew to about 70percent, with the responsibility of controlling all properties and other activities. Even though attentive efforts were made in the past through Regulation of the 1969 Petroleum Acts, application of the local content policy, the springboard for the sustainable transformation of Nigeria economy, were barely writing as paper work. This is an industry that contributes almost 80 percent of Nigerian government revenues and 95 percent of its foreign exchange; hence this is not acceptable to the Nigerian government thus the agitation for change.

As proposed by Nigerian Oil and Gas Development Law, (2010), local content is "the amount of combined value added to or created in Nigeria through the use of Nigerian resources and

services in the petroleum industry resulting in the development of indigenous capability and not compromising quality, health, safety and environmental standards". To achieve maximally Nigeria's goals for a strategic development, local content is framed specifically for the growth of Nigerian entrepreneurship and promotion of domestic assets. This scheme has the potential to create over 30,000 jobs in the next 5 years, and is also geared to increasing the domestic share of the 18 billion USD annual spending on oil and gas from 45 to 70percent, in addition to enhancing the multiplier effects on the economy, through refining and petrochemicals as suggested by The Nigerian Oil and Gas Development Law, (2010).

Emmanuel Okon said "The regulatory authorities in the oil and gas industry have been advised do more to ensure that International Oil Companies (IOCs) continue to award contracts to competent local firms as this is the only way to grow the capacity of indigenous firms and also create jobs for citizens" (Business Day, 2019).

2.3.3.2 Local Content Policy in Ghana

The ministry of energy of Ghana defines local content to the extent of using Ghanaian local expertise, goods and services people, business and financing in oil and gas activities as termed by (Ministry-of-energy, 2010).

In Ghana, local content is interpreted as 'the quantity or percentage of locally produced materials, personnel, financing, goods and services performed in the petroleum industry value chain and which can be measured in monetary terms' (Regulation 49 of L.I. 2204) (Ministry of Energy, 2013, p. 27). Local content policies creation is guided by five common targets. These are; to create employment, transfer of technology, local ownership, so as to process raw materials and to maximize local procurement as described by Ramdoo (2015). These are discussed in relation to Ghana's L.I. 2204. Regarding local ownership in Ghana's oil and gas sector, Regulation 4 (L.I. 2204) wishes foreign companies to enter into joint ventures with indigenous firms and to open equity to local partners so as to obtain a license.

Ghana National Petroleum Corporation (GNPC) is by law a party to all upstream petroleum agreements in Ghana. Furthermore, the promotion of joint ventures between local and foreign companies aims to provide opportunities for transfer of technology to indigenous Ghanaian companies, as outlined in Regulation 24 and 25 (L.I. 2204). Fundamentally, Ghana's local content law aims to promote the employment of Ghanaians at each level of the oil and gas industry value chain. Regulation 9 (L.I. 2204) states that qualified Ghanaians should be given consideration first with respect to employment. Minimum number of qualified Ghanaians to

be employed at each stage of a foreign company's process is also defined in regulation 9 (L.I 2204).

In Regulation 20 and 21 (L.I. 2204), foreign companies are required to submit a research and development plan before commencing their activities in Ghana. In order to localise the oil and gas industry sector supply chain through the maximisation of local procurement, Regulation 11 (L.I. 2204) requires that preference should be given to indigenous Ghanaian firms in the bidding process. The local content law, however, has no provision on the processing of petroleum products for export, which is a reflection of the low level of the manufacturing sector of the Ghanaian economy.

2.3.3.3 Local Content Policy in Tanzania

In general, the Tanzanian foreign direct investment (FDI) and mining legislation have adopted a flexible approach to foreign investors, with few formal restrictions related to ownership and local content. But the government is currently revising legislation for minerals, FDI and oil and gas in order to ensure much more local content and technology transfer, for example through local content requirements and supplier development programmes proposed by Hansen et al. (2014)

The Mining Act of 2010 stipulates that certain parts of the exploration cycle are reserved for companies that are exclusively owned by Tanzanian citizens and with provisions to promote backward and forward linkages. Multinational companies seeking prospecting and mining licenses are expected to draw up lists of goods and services that can be provided by local firms. Moreover, the Tanzanian Government has made provisions to facilitate the establishment of training institutions to develop industry-supporting skills, and also to encourage foreign investors to contribute to the development of skills and capabilities. However, these provisions are noticeably uncertain and non-binding, and consequently the process of forming local content is largely left to market forces as proposed by Mjimba, 2011; UNECA, 2013 cited in Hansen at al.

Recently, the Tanzanian Government has been contemplating a more restrictive approach to local content, most notably in upcoming oil/gas and mining legislations as well as in the draft Local Content Policy 11 as described by Hansen (2013). This change in policy probably reflects that many in the political elite feel that the country saw very few benefits from the first round of extractive FDI (mainly in gold), which took place in the 1990s Structural Adjustment Program liberalizations (Cooksey, 2011 a; Hansen, 2013).

2.4 Local Content Challenges

Countries that have integrated a local content policy within its economic development framework are also bound to encounter many challenges. These challenges apply to the regulatory frameworks that will improve value creation within the value chain of extractive industries like the oil sector. Such sectors consist of different activities from the point of extraction to its processing, and up to the point where it is made available for sale and utilization of its consumers. These processes occur among companies operating in the host country and the home country, and with their consumers. Impact on the distribution of value along the production chain as well as the global value chain itself can be linked to Local content policies. Within the economic logic they discover, low absorption capacity by domestic economic entrepreneurs, ill-conceived policies and weak institutions as factors that hinder local content. Within political logic they find that local content strategies are not aligned with political dynamic in Africa.

Hansen et al. (2016) finds that local content challenge lies in both economic and political logics. Therefore, its stakeholders may consider local content policy as a determining factor in making their investment decisions that could also prove to be critical in the formulation of public policies as strategically aligned with development goals of the country, to which it requires a deeper understanding of the processes that takes place from the point of extraction, processing and distribution of oil and gas. Oil and gas sector's activities can be classified into three groups; these are the upstream, midstream and downstream (Weijermars, 2010). The section below will discuss local content challenges in Nigeria and the way forward.

2.4.1 Nigerian Local Content Challenges

According to NCDMB (2016), Nigeria has experience in oil and gas exploration and production activities for about four decades and proven recoverable reserves of about 37 billion barrels, the greatest challenge facing successive administrations has been the country's inability to use the resource wealth as a means for national development and poverty reduction.

Adeboye, (2009), conferred that these challenges have their interpretation in how Nigeria can derive benefits maximally from oil and gas operations via excellent use of local competences and resources as practiced in Indonesia, Brazil, Norway and Venezuela. Whereas these countries started oil exploration and production activities after Nigeria but in their efforts to

grow the local content in this strategic industry, they have largely recorded outstanding success.

Nigeria's oil exploration, which started onshore has exceedingly improved the nation's daily production capacity to about 2.3 million barrels per day, this made her became an intimidation force within OPEC because oil and gas production was very fast and steady as describe by NCDMB, (2016)

Nigeria is ranked 20th poorest, and technologically backward nation in the world despite the country's ever growing profile and richness of natural resources (Vaaland et al., 2012). This is basically because the wealth has not been translated into improved welfare. One reason for this is that 90% or more of the yearly industry expenditures escape the domestic economy as capital flight thereby plunging the country in serious economic deficit.

According to Jean, (2012), despite the growth in the number of indigenous oil service companies, the recent annual gross earnings still account for less than five percent of the sector's aggregate annual contracting budget. Even the local media has been denied opportunity to advertise the activities of upstream companies in Nigeria as they desired. Some of these companies, even Nigeria LNG prefer to spend huge media budgets running into millions of dollars on foreign media like CNN, upstream journals and magazines, such budgets are hardly spent on Nigeria media.

From Nigerian National Petroleum Corporation's report, new produce of highly competent and experienced Nigerian engineers, geologists and geophysicists has emerged following an increased investment in human capital by the Nigerian National Petroleum Corporation (NNPC) as well as some of its joint venture partners over the years. Recently, some of them have established private oil prospecting and oil services firms, which are described as indigenous contracting firms. However, they are unable to get a share of the action at the upstream because of lack inadequate funds and not necessarily due to incompetence, as proposed by NNPC, (2012).

Nigerian banks have no adequate financial base to make meaningful impact on local content development. When it comes to energy financing, the biggest Nigerian banks are tiny banks. Because most indigenous contractors do not have proper business structure, thus the local banks cannot give the requisite financial support due to their fuzzy organisational structure. Others are not really in the business because more often than not the person who gets the

contract is not the one looking for finance. Other obstacles are a thin industrial base, lack of adequate power, water and other infrastructure to support an expanded manufacturing base, lack of small and medium-sized enterprises and an underdeveloped capital market as suggested by Jean, (2012).

A study by BGL noted that the primary objective of Nigerian content development which is to develop in-country capacity by executing contracts in Nigeria using Nigerian local resources is been defeated because of the argument of some industry stakeholders that over 70% of the contracts awarded to Nigerian companies are executed overseas as termed by Jean, (2012).

Other problems of local companies could be executive capacity; critical mass with technical and financial resources. Typically, most local companies are small and ineligible of packaging or attracting loans. Few of them can deliver projects that can be used immediately without resorting to some form of partnership agreement for equipment, expertise or technical support (ibid)

According to Jean, (2012), there is disconnection that exists between policy formulation and policy implementation in Nigeria; this lead to the absence of a critical link between strategy and action. Due to this gap, public policy initiatives and actions in Nigeria have persistently been incapacitated, thereby leading to many government programmes and projects ending in downright failure. Jean (2012) argued also that the causes for this gap could be weak institutional capacity, incompetent to think through, inadequate political will to carry through change, government policies are not consistent, corruption and lack of support from relevant stakeholders. This indicates that the future of the Nigerians is currently being restrained by foreigners whose main objective could be a better return on investment.

2.4.2 The way forward for Nigerian Local Content

Local companies counterparts from Europe and the United States are well endowed with capital thereby making it difficult for indigenous oil service companies' to compete effectively because of high cost of funds. This unfortunate development has reduced Nigerian banks, not yet cut out for long-term projects and with affection for quick business and immediate returns, to mere 'cash centres' (Jean, 2012).

Nigeria's oil and gas industry policy makers have to consider the idea of establishing a strong energy bank to empower local contractors or investors by that; their level of participation would increase and they would have the necessary experience needed to engender technology transfer (ibid).

For economic, military and political advantages to be guaranteed; technology transfer should be well programmed and aggressively pursued at. Hitherto, an increased number of Nigerians in managerial and professional positions in firms involved in upstream and downstream operations has been observed. However, the evidence of technology transfer is yet to be seen. Hence, for Nigerians to make meaningful impact, Nigeria needs her own unique strategy of technological progress pursued with all seriousness (ibid).

As opined by Jean, B. (2012), the nation's inability to develop her infrastructure is one more factor that did not allow local content improvement in the past that is still a challenge to current efforts. Coupled with this is a lack of a sound iron and steel industrial base, lack of foundries and effective machine tool for manufacturing. These are all part of the fundamental challenge, which the government must address through its privatization programme.

According to Jean, B. (2012) 'Government must remove the inconsistencies in the local content act, sincerely respect the local content blueprint and follow it carefully, especially in the awarding of contracts for deepwater and other projects in the oil industry. Such a policy should ensure that the refining sector and indeed the whole of the downstream sub-sector is commercialized and further opened to private-sector participation. It should also ensure that the country's existing refineries run efficiently.' Following Indorama/EPCL, Nigeria; this will be best achieved if core investors are brought in to acquire majority shares in the plants and to take over their management. With investors encouraged to set up refineries aimed largely at the export market, the policy will pursue the active participation of the private sector in refining.

To get exploration and production companies already active in the Nigerian upstream and new entrants, to be committed to downstream business as well as the development of energy infrastructure and assets should be the strategic objective of local content policy. The concept of extended enterprise that is virtual integration, outsourcing, collaborative R & D and networking must also be emphasized. Policies in the gas master plan must be pursued vigorously by channelling more investments into the gas sub-sector and more projects utilizing gas to produce energy-based derivatives such as the Escravos Gas-to-Liquids project and the Natural Gas Liquids project been required (ibid).

The Nigerian Content Consultative Forum (NCCF), this is in charge of networking in the oil and gas industry, the Nigerian Content Division, an arm of Nigerian National Petroleum Corporation (NNPC) and Nigerian Content Development and Monitoring Board (NCDMB)

newly created and charged with the responsibility of strictly enforcing compliance must work in agreement for the success of the local content policy (Chikezi, 2010).

For local content to be a success, NCDMB should not be captive to the factors which have created the chasm between policy substance and implementation which are; inadequate think-through, weak institutional capacity, absence of the required political will to carry through change, lack of support from relevant stakeholders and corruption (ibid)

Chikezi (2010), suggested that in order to have a spirit of competition in our indigenous fabrication yards, the government has to be real about the local content affair and must be reflected in an attractive fiscal policy or measures that can reduce import duties for steel, chemicals and other valuables as well as tax holidays for indigenous oil and gas firms.

2.5 Localization and Local Content Strategy

2.5.1 Localization

Localization, according to Deloitte (2015) has to be tailored for the company and the particular stage of the business or project maturity. For many upstream oils and gas companies as well as oil field services companies, a long-term, high capital expenditure spend project offers the opportunity to explore local manufacturing capabilities (enterprise and supplier development) by leveraging on the forecasted spend. It is pointless developing enterprises and suppliers, only to watch them fail due to sole reliance on the developer who may close down due to an exhausted reserve or curtailing of operations for financial reasons. Here, the long-term nature of the repeat capital expenditure (Capex) or open expenditure (Opex) spends results in a steady demand, thereby enhancing the sustainability chances of the supplier. More so, buying repeatedly allows the supplier to move up the experience curve, thereby addressing operational efficiency issues to rapidly become profitable. See figure 3 below:
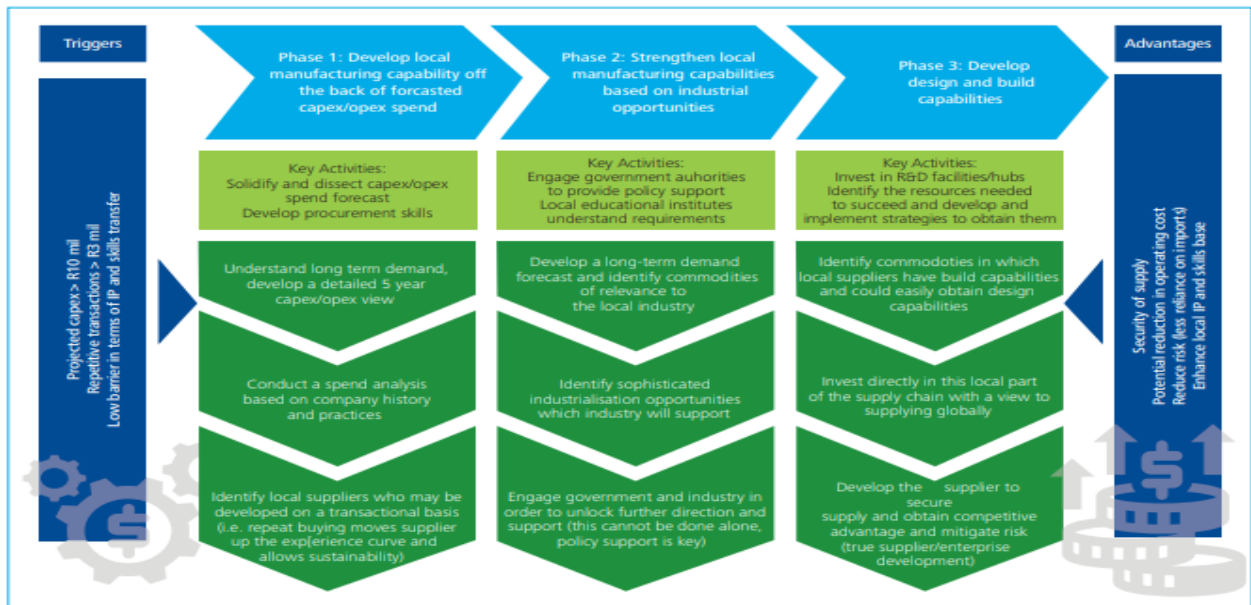
Figure 1: Localisation strategic journey through supplier and enterprise development adapted from Deoitte (2015)

2.5.2 Local Content Strategy

International oil companies (IOCs) are looking for a way to response to local content requirements in the countries they have projects running. Some examples of oil companies' strategies on local content are given in table 2 below:

Table 2: Oil & gas companies' local content strategy adapted from Mireftekhari (2013)

Company	Strategy brand	Main Segment
BP ▪ (2005) ▪ (BP, 2009	Local content development strategies	▪ Local supplier development ▪ Develop local expertise ▪ Local supplier participation
ExxonMobil ▪ (ExxonMobil, 2008)	National content strategy	▪ Development of workforce ▪ Development of Supplier ▪ Investments Strategically in the community
Equinor ▪ (Equinor, 2011)	Positive local impacts – Local content	▪ Local recruiting ▪ Local procurement ▪ Local supplier development ▪ Education and training

Shell ▪ (Shell, 2017)	Impact on local communities	▪ Jobs creation ▪ Building of capacity and technology ▪ Contracting and business opportunities ▪ Social investment
Total ▪ (Total, 2012)	Local content programs	▪ Local Recruitment and Training ▪ Increasing the Number of Nationals in the Workforce ▪ Supporting Local Entrepreneurs ▪ Supporting Small and Medium-Sized Businesses

Reasons why local content should be viewed as a strategic issue are highlighted below:

Primarily, it was a requirement from governments or national oil and gas companies that IOCs should have a plan of establishing local content in their project, for example Nigeria that required a 40% local content component for all oil and gas projects in its territory by the end of 2007. By the end of 2010; this component was increased to 70% (Australia, 2011). In addition, 10% of the annual profit of every multinational oil company in Nigeria must place in Nigerian banks. Also 50% or more of the asset of any companies that is seeking to execute oil and gas contract in Nigeria must domicile in Nigeria Menas (2008) cited in Mireftekhari (2013). Therefore, it is more than a business compliment and it is part of obligation that governments force companies to establish in their projects.

Secondly, local content is considered as corporate social responsibility (CSR) in developing countries. For instance, among NGOs and IOCs Statoil enjoys a positive reputation as one of the most responsible operators in Nigeria (Menas, 2008). Equinor (former Statiol) (2010 - 2011) has this to say about local content:

"We aim to make investments that create and maximize shared value for the benefit of both our shareholders and the countries in which we operate."

In other words, Equinor Nigeria's CRS program in the Akassa Community received a good deal of positive coverage, culminating in the project earning Equinor the 2005 World

Petroleum Congress award for Best Social Project (ibid). More so, Total (2012) Oil and Gas Company say this:

"Increasing the local content of our projects is a way of sustainably enhancing skills and building industrial capacity in host countries. This in turn spurs economic and social growth."

In conclusion, local content can have positive impact for both company and country. Recently, local content has come to include wider economic diversification, thus going beyond the oil and gas sector value chain (Tordo et al., 2011). For example, it can bring:

- operational costs reductions by keeping expatriate staff to a minimum;
- easy flowing supplies of goods and services;
- a consistent renewed license to operate
- enhanced engagement with stakeholders (IPIECA, 2011)

Equinor (2010 - 2011) confessed as follows:

"Investing in local content helps us to alleviate risks, while enhancing the benefits to our business and the societies in which we operate. Basically, we believe it helps to drive efficiency, reduce costs and improve project execution"

Thus, according to IPIECA (2011), given the growing importance of local content, several companies see it as a strategic issue that can have a direct impact on a range of core business functions, in the like of business development, procurement and operations. Also, if local content requirements can mitigate taxation and import duties, it can also make effort by asking companies to rearrange their supply lines as termed by Koudal and Engel, (2007).

Warner (2011) further added to the reasons given above by suggesting some approaches behind the role of contracting and procurement strategy to manage local content effectively local. More so, according to Emmett (2008), the five common unique "rights" of procurement processes are; seek to secure materials, equipment and services having the right price and at the right time, to get the right quality, in the right quantity and from the right place, this is important so as to avoid making trade-offs in pressure.

Ado (2013) proposes that "The strategically driven push by MNCs towards local content is complemented with public policy drivers of local content. Local content policies are particularly wide spread in industries such as defence, wind turbines, automobiles and

extractives. In recent years, developing countries have introduced a host of local content requirements and rules throughout their extractive industries", and approaches to foreign investors are more restrictive indicating a significant change in policy (UNCTAD, 2013, cited in Michael et al., 2016). Across Africa, mining codes, oil and gas concessions contain differently elaborate measures aimed at mitigating extractives' inherent enclave nature – measures such as local ownership requirements, local employment rules, production sharing agreements or local procurement requirements (Tordo et al., 2013.). Rules stipulating percentages for local procurement; tariffs, taxes and pricing aimed at favouring local content over imports; licensing and concessions conditioned by ability to create local content; local companies reservations for certain inputs and services; requirements for service provision, among others are the measures specifically employed to create local content (Hufbauer and Schott, 2013). The conception of local content policies made MNCs move from a strategic approach to local content towards a compliance approach (ibid).

2.6 International Oil Companies

Foreign based companies and suppliers are highly involved in the exploration and exploitation of natural resources in African countries. The discoveries of oil and gas has contributed in making the extractive industry the fastest growing sector in developing countries for example Ghana, Nigeria and Tanzania for the purpose of this work. Value chain activities in the upstream in this industry are dominated by international oil companies and foreign suppliers (IOCs), which are progressively exposed to local content requirement and expectations (Vaaland, 2015 cited in Giuseppe & Vaaland, 2017)

The government will continue to increase the application of local content and localisation compliance on all IOCs in the interest of oil-producing countries. Thus, it is important for international oil companies to differentiate themselves to include in their strategies a target on sharing their prosperity with the host country in a continual and jointly beneficial way this is as suggested by Deloitte (2015).

Responses from IOCs have been varied to date, with the majority of investors and African exploration presentations highlighting the importance of developing relationships with communities. While these IOCs acknowledge that stakeholder engagement and partnerships are important, efforts regarding sourcing labour, as well as goods and services locally, are typically compromised in the name of maintaining quality and safety standards. Select IOCs

have attempted to develop local contracting systems, but these focus on giving local companies a chance to access a bid and allow IOCs to appropriately evaluate a local company's capability. Where this falls short is that there is no focus on the long-term spends and the resulting opportunities that could be available to develop existing suppliers and even new enterprises (ibid). See the figure below.

Figure 2: Localization in Africa's oil and gas industry taken from Deloitte (2015)

Oil and gas companies (IOCs) should set the foundation during the exploration phase to comply with all local content and social contributions required for initial licensing. Looking beyond this, in order for local content to be sustainable, a long-term, end-to-end localisation approach must be followed from exploration through to decommissioning phases in the typical oil and gas lifecycle. Also, engagement with local communities, authorities and NGOs should commence from an early stage in the project lifecycle in order to lay the foundation for long-term relationships, allowing for active communication between all parties. Community consultation, development and stakeholder management are critical to mitigate reputational risk for investors and local stakeholders (Deloitte, 2015).

Furthermore, Long-term projects that create sustainable economic benefits for the host country work best if they are done in cross-industry joint ventures or in a clustered hub structure to leverage off co-located workforces and infrastructure. Socio-economic value is created by oil and gas companies when the localisation strategy is designed to be part of the overall development strategy of the host country (Ibid). The models below suggested some examples of forward and backward linkage opportunities:
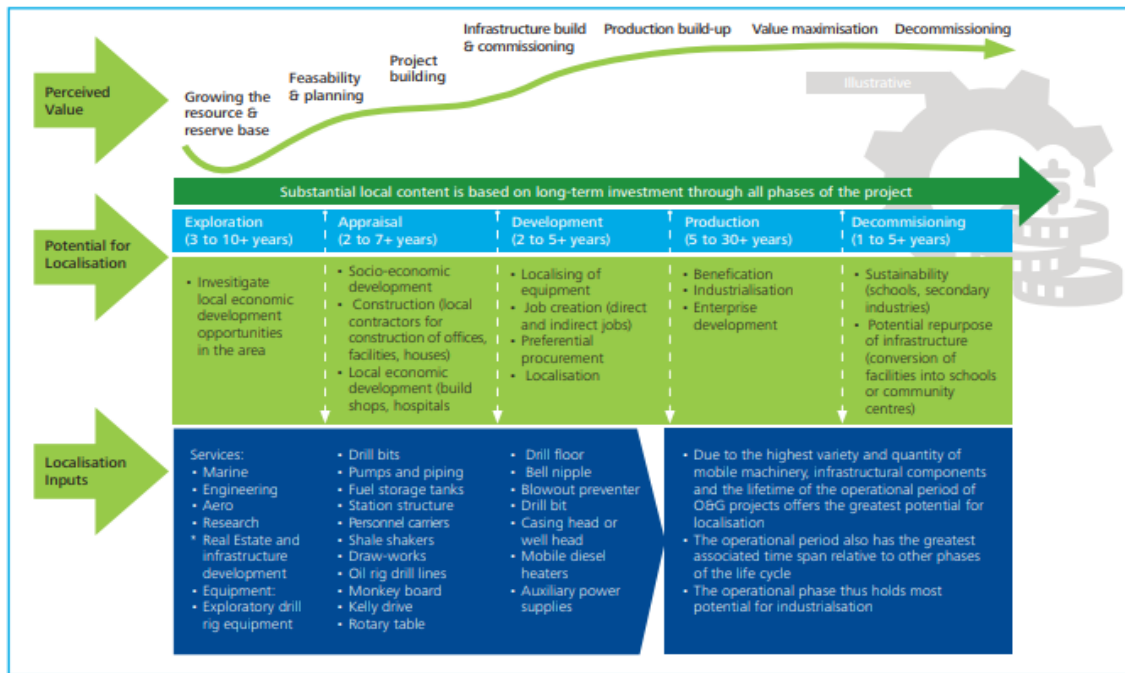
Figure 3: Backward linkage opportunities are possible along all links in the value chain taken from Deloitte (2015)

Transfer knowledge of methodologies and technologies to local industry through specialised training to enable employment on oil and gas projects is required from IOCs. Therefore, technology development in backward linkages provides a base from which sustained diversity may occur through the development of related industries to ensure empowerment of local suppliers and transferral of major ownership and control to nationals of the host countries (Deloitte 2015).

Forward linkages occur when the improvement of an industry can lead to the increase of the industries that use its output as their input, on the other hand when the output of an industry helps to advance another industry is forward linkage; for instance, exploration & production could create refining industries as well as associated suppliers through a forward linkage as described by Deloitte (2015).

The demand for petroleum products in Africa is ever increasing. However, the majority of African crude is exported and used in foreign refineries to be re-imported as finished products. This occurs as fuel marketers prefer imports from outside Africa, which supply a cheaper and higher-quality product. It is evidenced by research, that over the past decade only 7 of 90 refinery projects in Africa were completed. Thus, making use of local skills and capacity to develop African oil and gas finished product output, as well as enabling other

industries and local infrastructure to leverage off the oil and gas operations, will result in significant additional local benefits (Ibid).
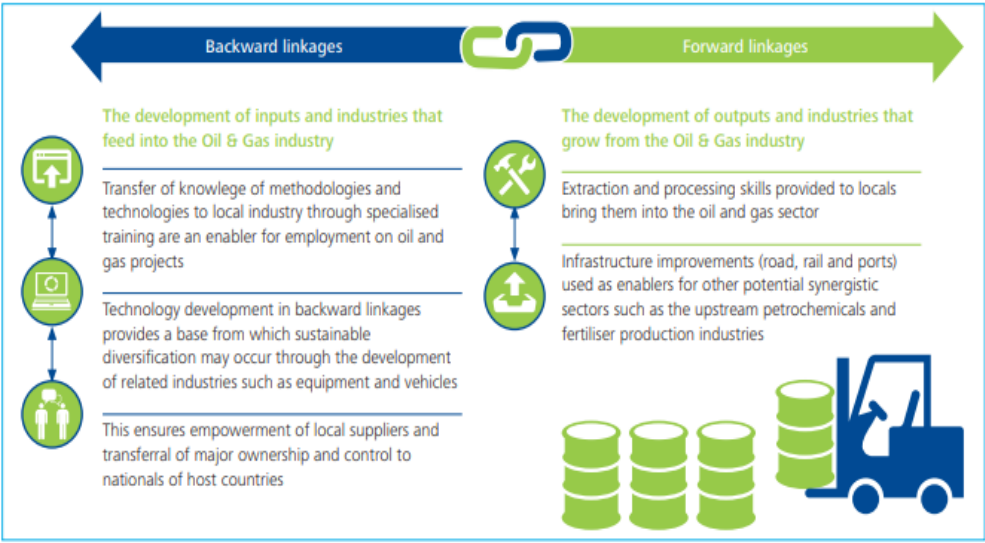
Figure 4: Backward and Forward linkages adapted from Deloitte (2015)

2.6.1 International Oil Companies Responsibilities

Taking actions to increase sourcing of local supplies in the context of local content is one of the business practices of IOCs (Blalock and Simon, 2009), to deal with local supplier opportunism (Liu et al., 2011; Zhou and Xu, 2012 cited in Michael, 2014) and developing global human resources strategies (Bjorkman et al., 2007; Egels-Zanden, 2014 cited in Michael, 2014) that can be adapted and implemented to enhance local legitimacy (Reimann et al., 2012) in specific host developing country. The success of such practice also depends on the formulation of clear business policy choices relating to financing, organisational forms and implementation (Chow et al., 2012). The success of multinational oil companies (MOCs) in a host country depends on how well strategies and practices are designed to ensure effective responses to major changes in the institutional policies of the host country as propose by Murtha and Lenway (1994).

The business practices used by international oil companies to respond to local content policies with the above reasoning, can be understood in terms of two inter-related areas, namely, technology capacity development and human capacity development, both come into play to shape IOCs' extensive contribution to economic development. See the figure below:
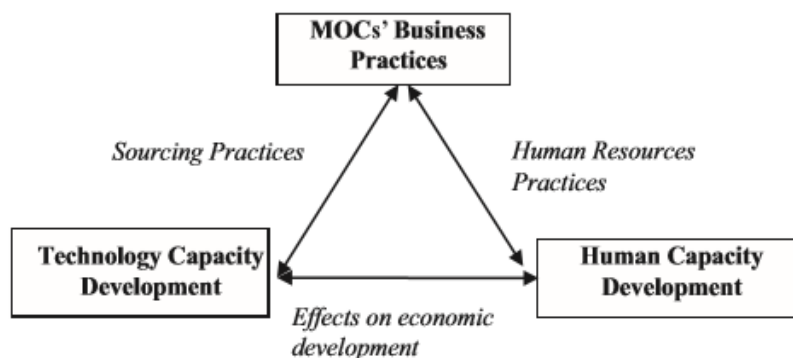
Figure 5: Argument about the business practices of IOCs due to local content policies taken from (Michael, 2014)

International oil companies are under pressure in terms of technology capacity development to source equipment from local suppliers where possible and or to support the upgrading of local manufacturing capacity so that they can serve as preferred suppliers. In terms of human capacity development; international oil companies are required to give preference to host-country nationals when recruiting and to develop their capacities and capabilities to work in IOCs' local operations. The combination of technology and human capacity development increases the productive capacity of the economy (in terms of jobs and income) and can contribute to efforts aimed at dealing with the resource curse problem by enhancing economic development (Klueh et al., 2009; Warner, 2011; Kazzazi and Nouri, 2012).

2.6.1.1 Technology Availability and Application

Developing countries like Ghana, Nigeria and Tanzania have adopted the use of Production Sharing Agreements (PSAs) that allows the International Oil Companies (IOCs) to transfer their technology, knowledge and finance to the host country because of the technological advancement in the petroleum sector and its use of specialized input (Manby, 1999, Taiwo, 2015 and Kow, 2017).

Ghana opted for the Production Sharing Agreement in order to receive greater benefits from oil resource. To be able to achieve this, the government operates through its state oil company, Ghana National Petroleum Corporation (GNPC). The government enters into petroleum agreements with the international oil companies through GNPC. GNPC enters into negotiations with a Model Petroleum Agreement which spells out the basic terms of agreement (Kow, 2017). As well, the terms of the agreement did not leave out local contents in the industry. According to Kow (2017) "The contractor is mandated to pay 200,000 USD

per annum to GNPC for the training of Ghanaian personnel in addition to employment so as to ensure effective technical and managerial skills transfer and efficient conduct of petroleum operations."

Research has reviewed that production sharing contract (PSC) has assumed a place of prominence in the contractual arrangement in the Nigerian upstream petroleum sector. Discoveries have been made majorly in Nigeria's deep offshore and inland basin through the production sharing contract arrangement. Approximately 32.8% of Nigeria's crude oil production is now covered by production sharing agreement or contract, particularly with fields awarded. PSC helps Nigeria to meet its economic desires by providing capital and technology for production. In this arrangement, the Government assumes minimal or no risk at all in the production of its petroleum resources (Taiwo, 2015).

As described by Manby (1999), Tanzania employs multinational companies in the oil and gas industry on merit of their technological and financial capabilities. Apart from the production sharing agreement requirement for the international oil companies to ensure transfer of technology, Tanzania has to put in place Local Content implementation strategies for the transfer of technology and knowledge. Local content policy aims at strategies development for fostering the transferring technology and knowledge. The Government needs to invest in research and development so as to seize the high competence opportunities in the oil and gas industry.

2.6.1.2 Financing Options

The key component of technology capacity development is to finance the upgrade of the technical capacity of local manufacturing firms. An example of this is BP's Cannonball Project in 2002 in Trinidad and Tobago (BPTT) directed at local supply chain development.

Michael (2014) says, "This included direct funding and technical assistance, training and mentoring through its local subsidiary BPTT leading to a replacement of established US-based suppliers with indigenous companies, and consequently skilled local engineers, designers and fabricators. This initiative is documented as part of BP's contribution to local content development in terms of building a competitive local engineering and fabrication capacities, creating employment for nationals and providing cost-effective solutions to future BP projects BP (2002).

In addition to direct funding, IOCs also partner with established local banks to facilitate access to funding, enabling local suppliers to upgrade their capacity to provide the quality inputs needed by IOCs. The Contractors Support Funding Scheme, a Global Memorandum of Understandings (GMoUs) between Shell and 5 major banks in Nigeria is a good example. Under this scheme each bank pledged $1 billion to the scheme to provide low-interest loans to local suppliers. Local suppliers who apply for the loans contractually agree to use the funding to develop inputs that are to be used by Shell's subsidiary in Nigeria. The involvement of local banks is also evident in Total's and Chevron's microfinance programmes that provide funding and technical assistance to indigenous companies in developing countries. (Chevron, 2013)

2.6.1.3 Workforce Development

This targets development of local workforce with the fundamental aim of enhancing productivity in the workplace and competitiveness. Also to be able to improve the quality of life of the workers; workforce development must increase the proposal of work and encourage labour mobility. This could even boost self-employment and improve the delivery of social services in the long run as termed by Deloitte. (2013).

To ensure that host-country citizens acquire the technical and managerial skills to work in the petroleum industry, IOCs announce initiatives they have implemented in terms of workforce development, where a lack of such skills hinders direct recruitment. LNG project established in Yemen in 2005 with a target to achieve 90% Yemenization of staff by 2015 is one initiative documented in Total reports as a contribution to local development. A training centre was established to train local people to be technical specialists, engineers and supervisors, including intensive English language courses and practical training abroad. A plan was established to replace expatriates with locals who complete the training, for example; competitive remuneration package to encourage them to return home (Total, 2005)

Similarly, Chevron's Local Business Development (LBD) certificate in Indonesia provides training to small business and cooperatives, thereby qualifying them to bid for contracts as certified suppliers as proposed by (Garrigo, 2011). Chevron justifies it's University Partnership Scheme in Angola, Indonesia and Nigeria in terms of training of high quality and low cost local employees as well as capacity building that involves local institutions such as universities in training and employing local people (Chevron, 2012)

2.7 Indigenous Companies Responsibilities

The fundamental duty of local content is to boost the participation of indigenous companies in the Nigeria oil and gas industry. Their participation can start as suppliers initially, but should rise into higher positions within the oil value chain, both domestically and globally. This participation has to build on the existing industrial base, which is generally weak in developing countries, thus this has become a major challenge. (Mwakali et al., 2011; cited in Vaaland 2015)

Even though the objective of local content requirements and policies is to encourage the involvement of indigenous companies in the supply chain, implementation requires local firms to comply with international standards. The involvement of local companies into the petroleum value chain compelled by legal acts inflict by public regulators toward IOCs if local companies cannot deliver the quality and dependability required to competitive industrial suppliers (Vaaland et al., 2012; Ihua et al., 2011; cited in Calignano & Vaaland, 2018). However, the local industrial base in a developing country like Nigeria is severely impoverished compared with their international competitors (Vaaland and Ishengoma, 2016; cited in Calignano & Vaaland, 2018). Indigenous suppliers development, particularly in technology-intensive areas, is hindered by the fact that they are SMEs, and are poorly linked to both natural resource-based industries and crucial actors (Torres-Fuchslocher, 2010; Ishengoma and Vaaland, 2016; Ojewale et al., 2001; cited in Calignano & Vaaland, 2018).

The oil and gas industry is capital intensive, aside this, it also requires high health, safety and environmental (HSE) standards. The significance of HSE in oil and gas operation is most apparent in light of the 2010 Deepwater Horizon oil spill in the Gulf of Mexico. This accident led to great loss of life and caused extensive damages (Cutler, 2011). Thus, it is very important for indigenous companies that would want to participate in the Nigerian oil and gas industry to enhance their HSE requirements knowledge. This is because all IOCs that facilitated the training of SMEs focus on company-specific HSE requirements. This is essential for most of these SMEs given the fact that there is generally limited enforcement of HSE requirements in the Nigerian context.

Local company has many definitions; these include "locally owned and locally based" and "foreign owned, but locally based" given by (Tordo et al., 2013; cited in Calignano & Vaaland, 2018). A narrow definition is the following:

    (a) Companies registered in the host country with a majority local ownership

(b) Companies that possess the appropriate expertise and financial viability

(c) Companies that have proven to be a contributor to economic growth in its area of operation as termed by (Nwosu et al., 2006 cited in Calignano & Vaaland, 2018.).

In the above definitions, there are no "pro-forma" joint ventures between a foreign company and local interests (Calignano & Vaaland, 2018.). According to Nwosu et al. (2006), such joint ventures are often established for matching local content requirements without real value creation. Indigenous companies include all local commercial actors directly or indirectly involved in the various levels of value creation and position in the supply chain seen in (Calignano & Vaaland, 2018.).

A local company can "blame" stakeholders outside the firm boundaries for a lack of involvement in the IOC supply chains, for example IOCs and Nigerian government. But it can also "blame itself" for not meeting the minimum criteria required for it to be involved in the oil and gas industry. This perception acknowledges the firm's own responsibility for improvement. In this respect, it is assumed that the firms will embrace supplier development programmes and express a motivation to actively participate this is as proposed by Calignano & Vaaland, 2018.

2.8 Conceptual models of local content in the oil and gas sector

The conceptual models for this study are based on the Frameworks of Kazzazi & Nouri (2012), Vaalandet al., (2012) and Vaaland (2015). The models are shown and discussed respectively: The development of a conceptual models for local content development in the petroleum industry have aimed at incorporating all important factors, actors and relationships, which impact the development of the local content improvement. The design and channels between the models constructs have also been conceptualized based on some understanding from published papers and reports. Figure 6 below illustrates the conceptual model on how the developed factors collaborate to create value for the host petroleum sector. As it is shown in Figure 6, local content development is in the centre and the four affecting factors have surrounded it.
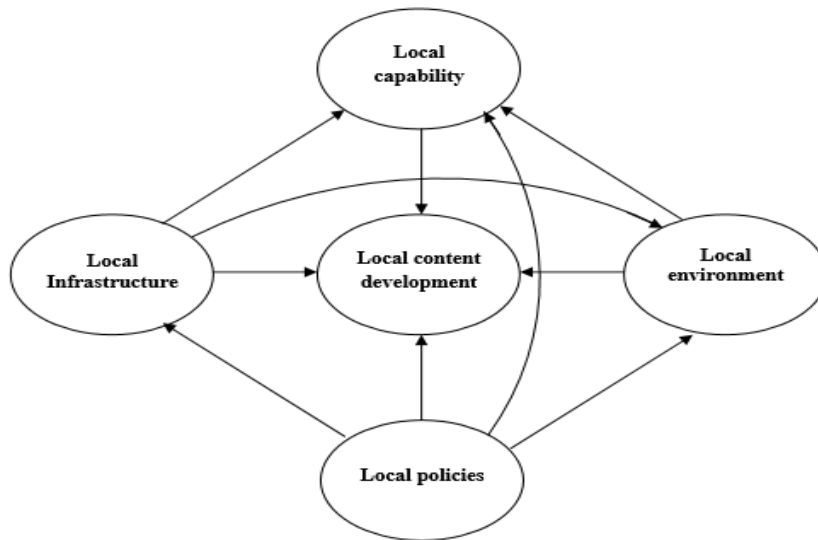
Figure 6: Conceptual model for local content development in petroleum industry taken from Kazzazi & Nouri (2012)

The variables in the local policies factor were found to have direct impact on local infrastructure variables. Each of these causal paths is described in Table 3 below.

Table 3: Description of factors and variables adapted from Kazzazi & Nouri (2012)

Factors	Variable
Local policies	- Public policies - Industrial policies
Local infrastructure	- Information technology - Local companies needs - Standard - Social infrastructure - Educational infrastructure - Business development infrastructure
Local environment	- Macroeconomic environment - Investments and business environment
Local capabilities	- Local companies capabilities - Education: skills and expertise development

	technology and know-how transfer capability
	▪ Research and development capabilities
Local content development	▪ Economic growth
	▪ Industrial growth
	▪ Spillover effects

Business interactions take place between actors who are active in the surrounding network through interdependencies among actors of the Nigerian oil and gas industry (Ford et al., 2003) cited in Vaaland et al., (2012). See figure 7.

It is important for managers of all companies and institutions involved in the oil industry supply network to understand how networking helps in achievement of increased participation in oil industry supply contracts by indigenous companies. Impressively, "managers need to move away from a classical strategy of beating the competition and profiting at the expense of their purchasers and suppliers and rather work with them. It is important for each actor to understand the complexity of the market environment and the different actors who control different types of resources and provide different complementary resources" Vaaland et al., (2012).

Actors of importance for achieving local content are not only the foreign companies. On the other hand, these companies and in particular the MNEs are very powerful in the network and they need to realize their collaborative relationships with the local economy and society. They also need to move towards more responsible networking in the country by supporting the ideas behind the Local Content Act. The notion "no business is an island" (Håkansson and Snehota, 1989) applies even to large, powerful, global oil firms operating in developing country like Nigeria. Evidence shows that easier tender contracts and procurement procedures as well as financial, technical, and managerial collaboration with indigenous companies, local research institutes and universities at the state and federal levels are required to achieve this aim. As indigenous companies benefit, they are likely to become positive advocates for the foreign oil companies proposed by Vaaland et al., (2012). See the figure below:
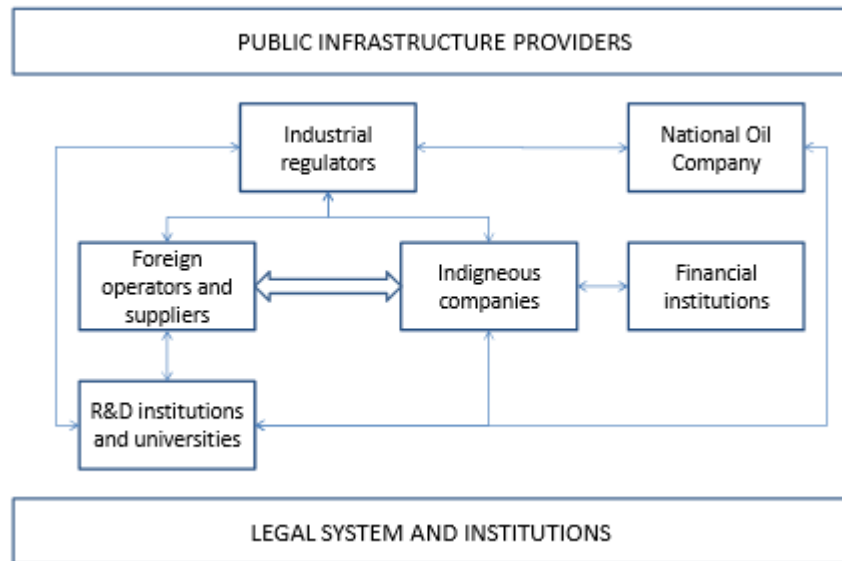
Figure 7: Crucial actors and relationships in the oil industrial network of Nigeria taken from Vaaland et al., (2012)

Based on the assumptions in industrial network theory (Håkansson&Snehota, 2006) cited in Vaaland (2015), industrial actors are interrelated through linkages (or synonymously relationships), with the actors and relationships representing the structure and some of the dynamics of the local content system (Vaaland et al., 2012.), (ibid). These linkages are described through three dimensions, actor bonds, resource ties and activity links as recommended by Vaaland (2015). In the background of local content, this indicates that the IOCs play a major role in four linkages as propose by Vaaland (2015).

i. The linkages with the local firm, in which the IOCs play a role in improving its capabilities to pass internationally, based minimum criteria for inclusion in the petroleum supply chain. The IOCs are challenged both in terms of governmental local content expectations and their internal ambitions for corporate citizenship because quality of the local supplier market is generally lower than the minimum criteria.

ii. IOCs linkage involves the foreign supplier and how these are encouraged to hook up with the local supplier through, for example joint ventures or other collective arrangements.

iii. IOCs linkage involves the learning institutions (embracing vocational training, higher education and R&D institutions). Through supporting activities, the learning organizations can improve the quantity, relevance and quality of a young workforce.

iv. The linkage that connects the IOCs with the authorities and includes a structural element in terms of local content policies and regulations, which make it mandatory to adapt to specific rules and the degree of local participation in the value creating process in order to operate.

Three other linkages were included as shown in figure 9:

- The first link is between the "struggling" local firm and the learning institutions. The competitive force of local firms will remain too low and hamper local content without an adequate educational system and the diffusion of a trained and well-educated workforce into local businesses.

- The second is the linkage with the finance institutions, funding of operations and investments is significant as no business can run effectively without fund or capital, but which is based on sound and reasonable accounting and financial management systems in the local firm.

- Third linkage involving the local firm includes business-enabling actors and the general business climate in which the local firm operates. Figure 9 recaps the actors and linkages necessary for developing local content.
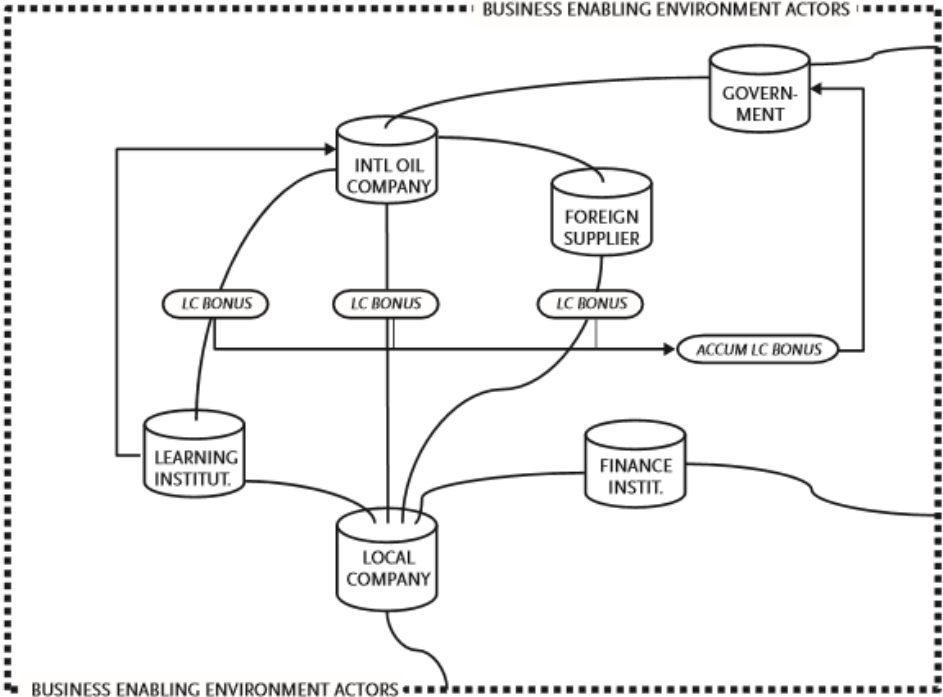

Figure 8: Local content actors and linkages adapted from Vaaland (2015).

Chapter 3 Research Design and Methodology

3.1 Introduction

According to Morse & Richard (2002, 2007) research questions and methods should all be linked and complementary so that the study appears as a cohesive whole and not as fragmented or isolated parts. My purpose in this chapter is to explain my choice of methods and justify them. Animportant act as local content in oil and gas sector requires strong methodological alertness because, the oil and gas sector is highly dynamic, often unstable, and perceived to be the exclusive preserve of multinational companies (Hennchen, 2015). The basic purpose of a scientific research is to find fruitful research questions and suitable methods to answer those questions, as describe by Widerberg, Hansen, & Album, (2010) as cited in Shella Amaya (2018). Qualitative research allows a phenomenon to be explored through an activity by the researcher (Marshall & Rossman, 2014). For the researcher to be able to identify the most effective ways of achieving the goals of the study and answering the research question, the selected research method and design is important. Firstly, for the purpose of this study, I choose qualitative research methodology. Secondly, I will explain in details the researcher's role, participants, research method and strategy, population and sampling, data collection processes, data analysis, and reliability and validity. Lastly, I will discuss assumptions, limitations of methodology and ethical considerations.

3.2 The Role of the Researcher

The researcher is the instrument for interacting and collaborating with participants to collect data in a qualitative research (Condie, 2012). My role as a researcher includes recruitment of participants for the research, selection of the appropriate research method and strategy, data collection and analysis. I worked for 2 years within the oil and gas industry and had built a network of people within the industry and maintained close social and professional contact with some key personnel in Nigeria through social media and telephone contact. Unluer (2012) suggested how important it is for social researcher's role to be clarified, especially for those using the qualitative methodology, to make their research credible.

To alleviate bias, highest standards of transparency was maintained. No potential conflicts of interest, personal or professional connections, or other circumstances that may have led to misrepresentation with the study participants. Another way I alleviated bias was through the use of member checking. Data sharing and interpretations with participants to verify the acceptability of interpretations of the participants' narratives is member checking (Marshall &

Rossman, 2014). Member checking allows researcher to communicate the summary of the developing topics and ask for feedback from all the participants. Member checking also allows participants to validate the findings as many times as possible until there is no need for further review. I identified and reflected on my assumptions and preconceptions to alleviate my bias as a researcher while using a bracketing technique as recommended by Tufford & Newman (2012). A researcher maintaining a note to expand clarity and engagement with participants' experiences by discovering forgotten personal experiences is known as bracketing (Tufford & Newman, 2012). Petty, Thomason, & Stew (2012) also identified the reflexive note as a valuable tool via which the researcher can acknowledge any bias that may affect data interpretation, and so allow the reader to consider the results of the study within its background.

A researcher must strive to uphold the highest ethical standards in the conduct of the research activities as proposed by Yin (2014). Ethics in research required that I protect the dignity and privacy of subjects as a researcher. The Belmont Report recognized the basic principles of conduct when research includes human affairs (U.S. National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1979). Some key guiding principles provided by the report are (a) respect for persons, especially those who are defenceless; (b) beneficence, or an obligation not to harm, especially to avoid any deception of the participant; and (c) justice, treating all participants fairly.

In the course of this study, I enhanced each interview session by using an interview guide that contained procedures to conduct interviews with the research participants (see Appendix I). As suggested by Jacob & Furgerson (2012), an interview protocol is a procedural guide for directing a qualitative researcher through the interview process. In planning the interview questions and increasing the reliability of findings, interview protocol is useful to the researcher (Turner, 2010).

3.3 Participants Selection

3.3.1 The Purposive Technique

In selecting participants for the study the purposive or judgmental technique was utilised. Purposeful approach grants a researcher opportunity to access or gather participants who will enhance the study by providing in-depth knowledge of the phenomenon and allows researchers use their judgment to select participants based on the study criteria (Suri, 2011). The purposive technique involved both criterion and convenience sampling. Hence, at

commencement of the study, the researcher set the criteria for selection of potential participants, speculated on what needed to be known and deliberately set out to find informants with certain qualities who can and were willing to provide the information by virtue of their knowledge or experiences (Kuzel, 1992 in Bardour&Bardour, 2003; Silverman, 2010; Burns & Grove, 2003; Cooper & Schindler, 2011). This was appropriate for data collection given the exploratory nature of the study and is suitable given the time limitations posed by a master's degree research.

3.3.2 The selection criteria

Leedy and Ormrod (2005) contend that researchers must justify the criteria for selecting particular units of study. Creswell (2007) as cited in Turner (2010) confirms how important it is for researcher to select the right and qualified candidates who can give the most reliable information to the area of study. For this reason and for the purpose of this study, a total of ten participants were selected and interviewed. These participants were chosen because they working in the oil and gas industry for and had the most knowledge and experience to address the research question.

After completing the selection of participants, I placed a call to each participant before sending the letter of invitation (see Appendix IV). The letter of invitation contained an explanation of the intent of the study. The participants read the email and gave their approval by replying to the email saying I agree to participate. After the participants had agreed to participate in the study, I scheduled interview times and dates via phone conversations. We all chose dates that were convenient for the participants. I made them to understand that their participation in the study was voluntary, and that they could withdraw from the study at any time. I gave the participant assurance on confidentiality and privacy, and I offered to sign any non-disclosure or confidentiality agreement the participant needed to gain his or her convenience.

The importance of building a relationship was highlighted by Yin (2014) and he noted that researcher should create a working relationship with participants to discussions simple and meaningful during the interviews. In order to establish a working relationship with my participants; I developed and used a strategy which was trust. According to Lauckner et al, (2012), researchers have the responsibility of establishing trust and sincerity with the participants regarding the intended purpose and outcome of the study. I utilized the

participant's confidentiality and anonymity clause to secure participants' trust and step up our working relationship.

3.4 Research Method and Design

Scholars have identified two main approaches to research namely: quantitative and qualitative research (Creswell, 2014; Silverman, 2010). The quantitative approach stems from a positivist paradigm and involves the collection and analysis of statistical data. It assumes that there are social facts with a single objective reality separating feelings and beliefs of people (Creswell, 2014; Silverman, 2010). The qualitative approach that is adopted for the purpose of this study is associated with the interpretive pattern. It involves understanding a phenomenon in its natural setting (Yin, 2003). It also recognises the prevalence of multiple realities and their social construction by human beings (Mason, 2002). This is suitable for this research since people have different opinion on local content policies. Mason opines that decisions about design and strategy are continuous and are found in the practice, process and context of the research itself in qualitative research. She also says "the role of a research design is to facilitate the coherent and rigorous development of the researcher's project by making explicit their current thinking about a number of key issues" (Ibid). More so, qualitative interview contains guidelines for deeper exploration of participant meanings and also helps researchers to get diverse views on a phenomenon (Yin, 2014).

3.4.1 Qualitative approach

This research is an exploratory qualitative and cross sectional study involving ten participants in the oil and gas industry. A qualitative study emphasizes on the use of words, instead of statistics to describe social phenomenon and attempts to reveal the deeper meaning and importance of human behaviour and experience (Lincoln & Guba, 1985; Yin, 2003). It is suitable for investigating the experiences of employees in oil industry and their personal reality, their understanding of the local content acts and IOCs responsibility in enhancing prequalification of local companies (Shaw, 1999; Leedy& Ormrod, 2005; Flowers, 2009; Yin, 2003). It also allow the researcher to gain new understanding of the phenomenon being studied, develop new concepts about the phenomenon and or ascertain the problem that exists within a phenomenon (Leedy& Ormrod, 2005).

A systematic personal approach used to describe life experiences and situations to give them meaning is a qualitative approach according to Burns and Grove (2003, p.19). A qualitative study targets on individuals' experiences as well as repeating the uniqueness of each of them

as proposed by Parahoo (1997). Understanding of how people make sense of their world and the experiences they have in the world is what qualitative researchers are interested in (Merriam, 2009). In a qualitative study, "research design should be a reflexive process operating through every stage of a project" (Hammersley & Atkinson, 1995, p. 24)

Qualitative research largely relies on interviews, observations, document review and audio-visual materials as sources of data (Creswell, 2014). For the purpose of this study, interviews were employed. This enabled the researcher to describe and provide meaning through analysis of the views expressed and at the same time allowed the informants to speak and provide their mindset on the research issue.

The approach asks the 'what' questions and is an appropriate reason for conducting an exploratory research, since the goal is to develop relevant assumption and proposition for further inquiry this is as termed by Yin (2003). Saunders et al. (2009) argues that the relevant way to find out "what is happening; to obtain new insights; to ask questions and to assess phenomena in a new light" is through exploratory research. The information, which is necessary to answer the problem area, was gathered through literary research, databases and scientific journals in order to get a general understanding, as well as an overview of the area of study. This is appropriate for this study since it allows the researcher to get close to the issue and to understand the dynamics therein (Shaw, 1999).

Leedy& Ormrod (2005) propose that the researchers must describe the procedural steps followed to solve the research problem. In addition, Lindsay (1995, p14) recommends that the methodology and design should, "… provide enough detail to allow a reasonably knowledgeable colleague to repeat the same study in a different environment and obtaining almost similar results." Hence, the following sub-sections consider the selection of participants for the study, data collection method, data collection procedure, process and analysis, research quality, limitations of research methodology and issues of ethics.

3.5 Population and Sampling

The population used for this research was eight indigenous companies and two IOCs operating in Nigeria. These indigenous companies provide services to oil companies in Lagos State, Delta State and Port-Harcourt in Nigeria. Hence, ten participants were utilized in this study. I used purposeful sampling method as it is appropriate for qualitative research and case studies as outlined by Walker (2012). Purposeful approach grants a researcher opportunity to access or gather participants who will enhance the study by providing in-depth knowledge of

the phenomenon and allows researchers use their judgment to select participants based on the study criteria (Suri, 2011). This thesis weighs in on oil and gas exploration in a developing country like Nigeria and aims at identifying international oil companies (IOCs) responsibilities to improve competitiveness of indigenous companies in Nigeria. Thus, I used purposive sampling to identify indigenous companies operating in the oil and gas industry, and criterion strategy of purposeful sampling because it involves selection of cases that meet predetermined criterion of importance. The predetermined criteria for selecting participants were (i) the participants must be the owner or employee of the indigenous companies (ii) the companies have had contract(s) with a major oil and gas company and (iii) the companies area of operation must be in Lagos State, Delta state and Port-Harcourt, Nigeria.

According to Yin, 2014, a qualitative researcher using the multiple case study method might raise the question as to whether the number of cases in a sample is sufficient. Malterud (2012) recommends that selected sample should be sufficiently large and varied to achieve the study objectives. She further clarified that a larger sample size can add intensity to the study but that the goal of the sample size should be to give the whole feature, not just to give definition of numbers or quantity of events. Yin (2014) recommends multiple case studies should be a selection of two or more cases with exemplary outcomes about the research question. For this case study, a sample size of 10 participants was sufficient to achieve data plethora. An appropriate number of participants required to achieve data saturation in a qualitative study could range from five to fifty as recommended by Dworkin (2012). An overly large sample size could result in repetition of information; on the other hand, a very small sample size might not provide enough data to form harmony in results. However, a small sample size might achieve saturation faster depending on the researcher's goal in the study as proposed by Mason, (2010).

Attaining plethora of data is essential to the success of qualitative studies. Dworkin (2012) asserted quality of interviews, scope of the study, experience of the participants, and number of interviews per participant, sampling procedures, and researcher experience influence data saturation. Saturation is a useful tool for ensuring that quality and adequacy of the data collected will support the research study (Walker, 2012). There is a great likelihood of reaching data saturation if the data collection is purposeful (Suri, 2011). The member checking process aids data saturation in qualitative research. The process I used involved conducting the initial interview, interpreting what the participant shared, and sharing the

interpretation with the participant for validation as prescribed by Patton (2015), Reilly (2013), and Richardson, Davey, and Swint (2013) cited in Inubiwon (2017).

Participants chose to engage in face-to-face interviews via Skype at their place of business. According to Bell (2013), Stake (2013), as cited in Inubiwon (2017) and Yin (2014), an appropriate environment for conducting interviews is a place in which the participants are not uncomfortable or restricted. The participants' offices for the interviews are quiet, private, and free from interruptions, which will further enhance the quality of the interaction.

3.6 Ethical Dilemma

Ethical research relates to the day-to-day ethical issues that occur while conducting research (Wallace & Sheldon, 2015). Specific processes and procedures are necessary to ensure an ethical execution of the study. Ethical research is voluntary and involves getting informed consent from the participants and full disclosure on the consequences of the research (Cooper & Schindler, 2011). Silverman (2000) recommends that researchers should always keep in mind that while they are doing their research, they are actually entering the private territory of their participants. Hence, they are required to put into consideration the rights, values, desires and needs of their informants as recommended by (Creswell, 2008).

All research involves ethical considerations. Generally, research ethics is mainly concerned with the conduct of a researcher, their responsibilities to informants, sponsors and the public (Dowling, 2010; Ryen, 2007). In making decisions relating to any research process, including methodological choices, researchers have to consider several ethical issues, including codes, confidentiality, privacy and consent, among others (ibid).

Furthermore, researchers need to protect their research participants; develop a trust with them; promote the integrity of research; guard against misconduct and impropriety that might reflect on their organizations or institutions; and cope with new, challenging problems (Israel & Hay, 2006). Ethical considerations relate to moral standards that the researcher should consider in all research methods in all stages of the research design.

When the selection of participants was completed, the researcher placed a call to the participants before sending the letter of invitation see (Appendix IV) via email. The letter of invitation contained an explanation of the intent of the study. The participants read the email and gave their approval by replying to the email saying I agree to participate. Furthermore, researcher made them to understand that their contribution to the study was voluntary and that

they had the right to withdraw from the study at any time for any reason. As advised by Wallace and Sheldon (2015), the participants were informed that I was not offering monetary incentives as the ethical consideration of voluntary consent might be compromised. As suggested by Head (2009), instead of monetary compensation, a copy of the final study can be sent to participants as an incentive and an offer to discuss the results further is acceptable.

The participants replied my mail and gave their consent to participate in the study and help me further with achieving my goal in this study. I remained courteous and professional at all times with participants through email contact, telephone contact, and video callas. Yin (2014) urged researchers to protect the rights of the participants, preserve their privacy and ensure paramount care during data gathering, data storage, and data analysis.

To guarantee confidentiality and privacy protection of participants, researcher ensured that the confidentiality and anonymity of the participants will be maintained through the removal of any identifying characteristics before distribution of information. The Researcher also made it clear that participants' names and company names will be assigned with a coded label. The assigned label for each participant's audio recordings, transcripts, and documents ensured anonymity and privacy.

3.7 Data Collection

This research used interviews as the primary data collection method which did not require total immersions in settings (Mason, 2002). According to Burgess (1982) in Ngutshane (2012, p50), "Interviews are particularly appropriate when the focus of the study is on the meaning of a particular phenomenon to the informants or participants, and where individual perceptions of a process or phenomenon are to be studied in an organisational context." Semi-structured interviews were conducted. As suggested by Creswell (2014), semi-structured interviews offer the following benefits:

i.   The researcher has the opportunity to probe whether the participants have provided sufficient answers.
ii.   The researcher is able to explain and clarify interview questions.

In addition, semi-structured interviews allow themes to emerge and be identified where little is known about the subject under investigation (Turner, 2010). However, it is difficult to code or process large amounts of data captured during the interviews (Creswell, 2007 in Turner, 2010). Furthermore, the interview guides should be carefully designed in order to avoid

ambiguity, and embarrassing, hypothetical questions (McNamara, 2009 in Turner, 2010). In summary, the methodology in this study was qualitative approach with the use of qualitative interviews to identify international oil companies' responsibilities and how they enhance competitiveness of indigenous companies in Nigeria.

3.7.1 Data Collection Instrument

In this qualitative study, I was the data collection instrument. Data collection took place using telephone interviews and relevant company documentation (e.g. annual business plans, strategy documents, and records) as sources of evidence as described by Yin (2014). An interview guide was followed (Appendix I) which outlined procedures to conduct interviews with the research participants. According to Jacob & Furgerson (2012), a procedural guide for directing a qualitative researcher through the interview process is an interview protocol. For this study, to ensure I gather all necessary information in a consistent and organized manner, I used the interview guide.

Semi-structured interviews promote synergy with informants in an interview situation so as to foster goal-oriented thinking, and utilize social negotiation and coproduction of knowledge (Mojtahed, Nunes, Martins, & Peng, 2014). Along with semi-structured interviews, I gathered formal documentation of local content processes specific to strategy and contracts or project execution of IOCs. The information was in the form of IOCs annual reports and strategy documents contained in their business plans. Use of documents assisted in my understanding as well as validated that such processes are in place and consistent with responses of the participants.

Member checking is important in a qualitative study, as it promotes the reliability of the study (Harper &Cole, 2015). Member checking also allowed participants to review their responses and respond to initial interpretations. Houghton, Casey, and Murphy (2013) proposed that member checking allows the participants to have a voice and commitment within the research process. I reviewed options for member checking with participants during the initial interviews to ease concerns about expectations and time commitments. Within 10 days of the interview, I provided copies of the transcripts to each participant to request validation of information as described by Thomas and Magilvy (2011). I asked the participants to review the transcribed interviews and note errors or missing information. Participants were also asked to review the transcript and provide comments that validated, corrected, or clarified the original interview. The summary of my interpretations were sent to participants and asked if

the summary of responses accurately reflected their responses and if they could provide more clarification or give additional information. Giving an opportunity for study participants to review the accuracy of the interview responses can improve the quality of the data collected as noted by Harper & Cole (2012).

3.8 Data Collection Technique

The data collection procedure commenced with interviews and review of relevant company documents (i.e. business plans and annual reports) as secondary data sources for this study. Interviews are useful to qualitative researchers to understanding opinions, attitudes, experiences, processes, behaviours or predictions of the subject matter of interest (Rowley, 2012). A qualitative research is exploratory in nature and is primarily concerned with achieving observations and understanding on basic reasons and motivations. Vaus (2002) acclaimed that qualitative methods often provide substantial data about real life people and situations and a better understanding of behaviour in its extensive background. The vital sources and procedures associated with qualitative methods are observations, interviews and document analysis as suggested by Yamagata-Lynch (2010). Qualitative approach was the methodology used in this study with qualitative interviews to identify international oil companies (IOCs) responsibilities to improve competitiveness of indigenous companies in Nigeria.

3.8.1 Primary Data- Interviews

Interviews are commonly used to reveal the experiences of different people and tend to involve samples of people from different perceptions dealing with similar situations. To obtain information where direct observation of the phenomenon is difficult interviews should be used (Creswell, 2009).

Different types of interview such as structured, unstructured semi structured interview, group interview and focus group interview are recognized by Mojtahed, Nunes, Martins & Peng (2014). For the purpose of this study, the researcher used face-to-face (via Skype), semi structured interviews option as interview tool. The interview protocol as noted in Appendix I was also used to maintain the focus of the interview and provide consistency for my interview with each participant. The interview protocol assists researchers to promote consistency by asking same interview questions to all the participants. The interview protocol also promotes the quality of information obtained from participants and helped to reduce bias as proposed by Jacob & Furgerson (2012).

Semi structured interviews as proposed by (Turner, 2010) allow a researcher to introduce additional questions to a fixed set of questions to explore the phenomenon. Semi structured interviews can also provide reliable, comparable qualitative data and allow participants to express their viewpoints. Semi structured interviews are free from barriers and result in the gathering of rich data that enable understanding of the processes, networks, and relationships as described by (Drew, 2014). A likely disadvantage of a semi structured interview is less information collected during each interview when compared with information collected through unstructured interviews (Rowley, 2012). Rowley (2012) also recognized semi structured interviews are labour intensive and may require interviewer sophistication. The reduced amount of data collected during semi structured interviews makes the processing of data more feasible as the researcher is obliged to analyze all data that were collected (ibid).

3.8.1.1 Interview Process

The researcher called the participant to confirm the interview date, time, and location before the scheduled interviews. During the interview session, the interview location, the date, the time, demographics and surroundings were noted and hand-written in a small notepad. Before commencing the interview, I allowed the participant to review a copy of their signed Participant Consent Form. The researcher then:

i.   Introduced the purpose of the study in order to build rapport with participants and

ii.   Explained how the results would be reported, assuring participants that any comments made during the interview will be non-attributable and names of people and organisations would remain confidential.

I proceeded with the interview and review of the documents until it became repetitive and no additional information was needed as described by Walker (2012) for a case study design. Each of the interviews did not last longer than 40 minutes. Immediately following the interview, I collected company documents from the participants via emails.

Member checking as described by (Harvey, 2015) is a process of confirming the responses of members or participants to ensure the accuracy of data collected descriptions and interpretations. Member checking has to do with returning of interpretative summaries to individual participants for verification and confirmation of their correctness. The researcher performed member checking, a process that involves conducting the initial interview, interpreting what the participant shared, and sharing the interpretation with the participant for

validation as recommended by Patton (2015), Reilly (2013) and Richardson, Davey, and Swint (2013).

After transcribing the recorded interview answers, I asked the participants to read their responses for accuracy by showing the participants the transcripts for their review of errors or discrepancies to enhance reliability as suggested by Stake (2010).

In addition to the interviews, I examined business documents (e.g. business plans, and annual reports) to ensure data alignment and relevance. I organized the information contained in the documentation by the case and compare them for similarities and differences in processes explained in the interviews as described by Irwin (2013).

To protect the identity of the participants and the organization, I removed all identifying labels from the company documents and labelled them with unidentifiable alphanumeric codes. I used alphanumeric codes, P1, P2, P3, P4, P5, P6, P7, P8, P9 and P10 to represent the 10 participants.

3.8.1.2 Limitations of interviews

This methodology identified the following limitations according to Creswell (2008):

- The limited number of interviews due to the limited time and exploratory nature of the study.
- The "Hawthorne effect" resulting in participants only give information that they think the interviewer wants to hear (Creswell, 2014).
- Face to face interviews are costly and time consuming.
- Two of the interviews were telephonic and this might have affected the rapport between the interviewer and interviewees.
- Purposive selection relies on the subjectivity of the researcher and researcher bias could lead to misleading results (Cooper & Schindler, 2011; Creswell, 2014).
- A phenomenon can be understood differently therefore, not everyone can express distinctly their perceptions and hence may give incorrect information about their views.
- Except for the theory, the results or findings are not generalizable (Yin, 2003).

Even though the above limitations were identified, interviews allow the researcher to have control over the line of questioning and are very useful when participants cannot be observed directly.

3.8.2 Secondary data

Readily available data that have been collected by other researchers is secondary data. These data are gathered from other sources that do not deal directly with the research question or problem of a specific paper, but they provide valuable insight as proposed by (Yin, 2014). Secondary data are cheaper, they save time, and make collection of primary data more specific since gaps, shortcomings and further information needed to be collected can be identified with the help of secondary data.

Secondary sources of data used in this research include International Business and Management Journals, Strategic Management Journals, Journal of Energy Technologies and Policy, African Journal of Business Management, Journal on extractive industries and society, Industry-based reports and publications, various policy and regulatory documents such as the local content law, the petroleum revenue management Act, Exploration and Production Law, Petroleum Technology Association of Nigeria (PETAN), Nigerian Content Development and Monitoring Board (NCDMB) etc. News items from various sources also provided useful data for this study, such as business magazines, online news publications and other electronic news on the oil and gas industry.

Available documents from IOCs, subcontractors, indigenous supplier companies, various local and international reports on Nigeria's extractive sector were also analysed. However, Informants were restricted from making most of these documents available to me because most of the contracts between parties in the oil and gas industry are subject to confidentiality clauses. In general, the secondary data therefore provided contextual, comparative and case-specific information relevant for this study.

3.9 Data Analysis

The process of organizing, transforming and modelling data with the aim of eliciting useful information, suggesting conclusion and improving decision making is known as data analysis (Judd, Charles &McCleland, 2011). Qualitative data analysis is the process of organising data, breaking them into manageable units, coding them, synthesising them, and searching for patterns as defined by Bogdan & Biklen (2003). Polit et al., (2001) say analysis of qualitative data is an active and interactive process. It involves inductively working with data from particulars to more general perspectives such as themes, dimensions, codes or categories termed by (Creswell, 2008). In a case study research, Yin (2003) discusses the need for searching the data for "patterns" which may explain or identify causal links in the data base.

Categorisation helps the researcher to compare and contrast patterns and to draw meaning from data.

The process of data analysis starts with organising and categorising in order to find patterns, and themes that emanate from the data. "Open coding" that involves identifying and provisionally naming categories for grouping the observed phenomena, is commonly used (Strauss & Corbin, 1990), with the aim of creating descriptive and multi-dimensional categories that provide preliminary framework for analysis.

An interactive activity and analysing data produced through qualitative methods is an ongoing process in a qualitative research. As recommended by Carlson (2010), my data analysis include (i) an audit trail of all recordings, notes, and transcripts, (ii) reflexivity by the researcher' (iii) thick and rich descriptions across each case study, and (iv) member checking (In qualitative research, a member check which is also known as participant/informant feedback or respondent validation, is an approach used by researchers to help enhance the accuracy, credibility, validity, and transferability of a research). I edited transcriptions into a condensed form removing filler words, off-topic discussions, and repetitive phrases for easier processing and member checking. Researchers should perform member checking in person at the discretion of the participant (Carlson, 2010), because I am in Norway I did this via video calls. Irwin (2013) recommended data gathering and analysis take place concurrently to identify errors and correct them before finalization into the data model; this study took that into consideration.

The primary task of qualitative research dwells on the knowledge extracted from the interview process including factors that may be indirect or contextually limited (Kapoulas & Mitic, 2012). As suggested by Hartman (2013), I approached the interview data analysis with a cautious self scrutiny, and acknowledged my perspective and the research setting. Thus, researcher made every effort to reflect the expressions of reality as perceived by the participants.

To analyse and interpret data as it places the importance of insiders' viewpoints in understanding social phenomenon researcher used interpretivism or constructivism as suggested by (Miles & Huberman, 1994; Flowers, 2009). The process was very iterative and involved revisiting earlier steps as new themes and insights emerged, and served to update the literature review accordingly (Punch, 2005). A modified Ritchie and Spencer's (1994)

framework was used to sift, chart, and sort data accordingly to key issues and themes. The framework has five steps:

- familiarisation,
- Identifying a thematic framework
- Indexing,
- Charting
- Mapping and interpretation.

3.9.1 Familiarization

Data from interview transcripts was sifted and sorted through a process of immersion. This involved listening to the recorded interviews and rereading interview transcripts and subsequently, data reduction, identifying and capturing key ideas and themes.

3.9.2 Identifying the thematic framework

The thematic framework was derived from the literature review in chapter 2 and 3. Thus data and themes emerging from the interviews were superimposed on a predefined template.

3.9.3 Indexing

Indexing according to Ritchie & Spencer (1994) refers to the process of systematically applying the thematic framework to the data in its textual form. The thematic framework derived from the literature was applied to the interview transcripts. Thus, the data was coded against this pre-formatted template and presented in an appropriate form using charts or tables.

3.9.4 Charting

This involved "lifting data from its original setting" and rearranging it accordingly to fit themes derived from the literature reviews (Ritchie & Spencer, 1994). Charts or tables were used to present data in a clear and orderly manner, consistent with the order of participants as provided by their background information (see chapter 4). The charts or tables were by case for each respondent across all themes, with the themes on the horizontal row and the case of the vertical column. The data presentation is in the following chronological order:

- An introduction of the major and sub-section. For each sub-section, the factors or sub-times being explored are introduced, followed by an overview of the results,

- Data relating to the interviews presented in a table with an "X" in the box indicating comments or statements corresponding to the sub-themes or factors and the respective participant,
- A narrative including some verbatim statements discussing the data.

3.9.5 Mapping and interpretation

This process was done in the form of discussing the research findings in relationship to the literature review. This involved searching for patterns, associations, concepts, and explanations in the data. According to Ritchie and Spencer (1994) the researcher defines concepts, maps the range and nature of phenomena, creates typologies, finds associations within the data, provides explanations and develops strategies.

3.10 Research Quality

A qualitative study must be credible, transferable, dependable and confirmable as suggested by Lincoln & Guba, 1985; Silverman, 2010 and Creswell, 2014. This is necessary for the reasons below:

- Credibility according to Creswell, (2014), refers to whether or not the research findings are authentic in representing some form of reality.
- Creswell, 2014, proposed that transferability is concerned with the generaliseability of findings to other backgrounds.
- The assurance of stability and quality of data collected, such that a subsequent researcher can draw on the findings, interpretation and claims of the study is dependability as described Silverman, (2010)
- The internal coherence of the data in relation to the findings, interpretations and recommendations is known as conformability opined by Creswell, (2014).

Actions were taken to ensure the research quality as shown in Table 4

Table 4: Actions taken to meet criteria for research quality

Criteria	Action taken in the study
Credibility	The research approach and methods used in this researsh are well-established and the participants were purposively selected.
Transferability	Except for theoretical consideration, the results are not generalizable.

Dependability	In order to gather multiple perspectives, a number of participants were selected. The interview guides were pilot tested and modified appropriately.
Conformability	A systematic process for collecting, analysing and interpreting data was used.

3.11 Summary

This chapter focussed on the research methodology. A qualitative exploratory cross sectional study of eight indigenous companies operating in the oil and gas industry and two IOCs operating in Nigeria was carried out to explore how IOCs responsibilities have enhanced local suppliers' participation in the oil and gas industry in Nigeria. An interpretive paradigm was used to understand the experience of participants as well as draw deeper meaning from their everyday realities and interaction with the environment. The research methodology was effective and sufficient to explore the main research problem, associated research questions as well as fulfilling the research aims. The research findings were able to illuminate pertinent information and add to the understanding of business strategies of indigenous companies and IOCs in Nigeria.

Chapter 4 Presentation of the Data

4.1 Introduction

This chapter connects the empirical findings of the analysis of the interviews and blend them with literature review and the theoretical framework described in chapter 2 & 3. The primary task of this chapter is to reflect on the thesis' main research questions in light of the empirical findings and in connection to its theoretical design.

Chapter 4 defined the approaches and procedures for collecting and analysing data in exploring the main research problem: Identifying international oil companies (IOCs) responsibilities to improve competitiveness of indigenous companies in Nigeria. The research questions: What business strategies do indigenous suppliers use to compete favourably in the Nigerian oil and gas industry? How do the IOCs and foreign suppliers connect with indigenous companies in their supply chain to build adaptive activity systems? What motivates the IOCs to include indigenous companies in their value chains? These questions will be addressed in this section.

Qualitative approach and a multiple case study design were used in this research. Thus, this section presents the findings from semi-structured face-to-face interviews conducted through Skype with eight indigenous companies and two IOCs operating in Nigeria. Some of the companies' annual business plans and reports were reviewed by the researcher. The findings contain strategies indigenous companies use to compete successfully in the oil and gas industry in Nigeria and how IOCs roles have enhanced local suppliers' competitiveness. The demographic profile of the participants and the presentation of results are given below.

4.2 Demographic Profile of Participants

Ten interviews were conducted in total; eight were face to face through Skype and two was conducted through WhatsApp call. The participants were eight indigenous firms and two IOCs doing business in Nigeria as primary sources of data and key informants respectively.

4.2.1 Eight selected indigenous firms

Summary of the profiles of both participants and eight selected indigenous firms denoted "IF1 to IF8" and participants as ''P1 to P8''. The indigenous firms differ in the educational levels of the owner managers, firm size, age, industry sectors, business activities and their products or services are at different levels of maturity. All the participants hold academic qualifications

ranging from bachelor to doctorate degrees. Industry sector from which participants were drawn was oil and gas, while the business activities of these indigenous firms show that participants had diverse business experiences which to a larger extent, raise the credibility of the results of the research.

Table 5: Demographic profile of the eight indigenous firms.

Company	Code	Years of experience	Position	Degree
IF1	P1	10	CEO	Master's degree
IF2	P2	5	Relationship Officer	Bachelor's degree
IF3	P3	8	Business Developer	Master's degree
IF4	P4	15	Managing Director	Doctor of Philosophy
IF5	P5	4	Service Planner	Master's degree
IF6	P6	11	Project Coordinator	Bachelor's degree
IF7	P7	7	CEO	Master's degree
IF8	P8	12	Managing Director	Master's degree

4.2.2 Two IOCs informants

Two project managers working with ICOs were interviewed as IOCs key informants and are denoted, "KI1 and KI2." The managers interact directly with indigenous firms through their various support programmes and have insights into indigenous firms' business strategies. The participants hold either middle or senior management position as shown in the table below. The demographic profiles of the manager with business developer are shown in Table.

Table 6: Demographic profile of IOCs informants

#	Codes	Years of experience in oil and gas Company	Management level	Degree
1	KI1	20	Senior manager	Master's in Petroleum engineering
2	KI2	18	Senior manager	Master's in electrical and electronics

4.3 Presentation of Results

This section presents data collected via ten qualitative interviews. The presentation of data is guided by five major themes identified in the theoretical framework namely:

- Local policies
- Local infrastructure
- Local environment
- Local capabilities
- Local content crucial actors and linkages

The participants were asked to describe what motivate IOCs to involve indigenous companies in their value chains the business strategies they use to compete favourably in the oil and gas industry. In this part, I summarize the business strategies indigenous suppliers use to compete favourably in the Nigerian oil and gas industry and how IOCs or foreign supplier connect their activities with the activities from the indigenous supplier to build adequate activity system as well as what motivate IOCs to involve local companies in their value chains. I can say that one of the most important factors that motivate IOCs to involve local companies in their value chain is capabilities or competencies as the case may be. Here, local content development will be discussed in terms of *local policies, infrastructure, environment, capabilities, local content crucial actors and linkages.*

The results are presented in a sequential order starting with results of interviews of indigenous firm participants followed by IOCs key informants that is; from the first participant to the last. The presentation uses both a narrative format and tables. It follows the step indicated in section 4.9.:

- An introduction of the major and sub-section. For each sub-section, the factors or sub-times being explored are introduced, followed by an overview of the results,
- Data relating to the interviews presented in a table with an "X" in the box indicating comments or statements corresponding to the sub-themes or factors and the respective participant, in other words Participants perception of local content act/development can be illustrated by the table below where "x" represents a perception on capabilities or competencies as the factor that motivate IOCs to involve local companies in their value chains.
- A narrative including some verbatim statements discussing the data.

Participants	Local policies	Local infrastructure	Local environment	Local capabilities	Local content crucial actors and linkages
P1	x	x	x	x	
P2	x	x	x	x	x
P3	x	x		x	
P4		x	x		x
P5	x	x	x	x	x
P6	x	x	x	x	x
P7	x	x	x	x	x
P8	x	x		x	x
P9 (KI1)	x	x	X	x	x
P10 (KI2)	x	x	x	x	x

4.3.1 Local policies

Dimensions of economic sectors including oil and gas industry are concentrated in local policies. These policies will generate a more forecasted macroeconomic environment, increase the reliability of institutions and the legal system, provide incentives to enhance sound business practices, generate a more enabling infrastructure for business development, and enhance social structures, which would contribute to inclusion and participation as described in (INTSOK, 2003).

Some informants offered this confession concerning local policies during the interview that their businesses were successful as a result of the opportunities provided by the government:

- *"The Nigerian local content act has contributed greatly to the success of local businesses; the present administration has executed a robust fiscal system for gas that*

is not dependent on oil. These proposals include modifications to Section 39 of the Companies Income Tax Act to further strengthen gas utilization in the domestic market. This is giving a competitive hedge to local firms that have proved over time that they have what it takes to compete in Domestic and international markets.'' (P1 IF1)

- *''the kind of support we receive from government policies has done a lot for local firms but of course; unless you take the necessary action to claim these rights you may never have a feel of it. The local content policies in my opinion have been very helpful for local firms and also giving them huge competitive business advantage.'' (P2 IF2)*

Some participants reported that they were getting the expected support from the government and one key informant reported that local law and cultures affect their businesses. Participants also said they were not getting enabling assistance:

- *''The backing we have had so far from government institution is discouraging. It is so lagging that we can't even compare it to neighbouring West African countries, our government really need to do more in this and I do expect it soonest, since current administration has proposed to enact some bills that will aid local firms.'' (P3 IF3)*

- *"I have come across so many individuals that have asked me this question severally, and my response is that there is need for more fiscal policy to empower the local firms. We need an enabling assistance that comes in form of law; this will help local firms to grow." (P4 IF4)*

- *''The influence of local laws, cultures and geography can affect the successful local content policy in the oil and gas enterprise, and for an economic development to exist, there have to be an overall view about each territory that is able to address the strategic choices of the community.'' (P9 KI1)*

Majority of the participants stated that they are impressed with what local policy is doing to improve their competitive advantage and how such policy will mandate IOCs to involve local firms:

- *"Remarkable developments in local content have been recorded. Some local companies have been providing high-quality services over the years, unfortunately so many people do not know about their work. To be able to continue to improve, it is crucial to both increase competence and keep better records of all of the available local firms that provide services. Indigenous providers are more expensive than*

foreign competitors in some services. It is important to understand where this gap emanates from, then it can be tackled and the competitiveness of indigenous service providers can be improved. To have local services is self-evident and convenience, but more need to be done to develop them." (P5 IF5)

- *"There have been developments of recent that are worth mentioning, one of its kind is the reduction of tax on capital equipment this has greatly, encourage and help many local firms to acquire latest equipment and technology. Without such support I can tell many of the firms today show casing their latest technology will be nowhere to be found." (P6 IF6)*

- *"The government has recently introduced some set of policies that are helping local firms to gain better grounds, and I will like to be that this be the first of many to come. We need such laws that mandate the IOCs to work with local firms this way the local businesses too can grow." (P7 IF7)*

- *"Some policies in the recent times have proved to be very effective, I can only hope that more measures are introduced to give more opportunity and capabilities to local business. In the nutshell, the local policies or local content law is worthwhile." (P8 IF8)*

- *"They have a very huge impact. Before now, companies are mindful of the tender process because of prices; that is they were always careful about contract prices. Local content laws brought about scopes that local firms now think of the commercial values instead of prices provided the commercial value is not more than 10 percent of particular amount of contracts." (P10 KI2)*

4.3.2 Local infrastructure

In this section, the key informants were asked to report on what they perceive to be factors hampering local content development in Nigeria in terms of local infrastructure. They confirmed that lack of technology infrastructure, lack of funds, unavailability of the right skills and government policies. The results from the interviews focusing on local infrastructure are presented below:

- *"In my opinion, and after been a project manager in Nigeria for 13 years, I can say lack of funds, unavailability of the right skills, government policies, etc are factors affecting the development of local content." (P9 KI1)*

- *"Citizen's social well-being will be on the increase if basic infrastructures are in place with good maintenance. It is also important for local supply industry to be more*

competitive. Information Technology infrastructure is no doubt an important component that has a meaningful effect on local content development." (P10 KI2)

The participants from indigenous firms confirmed that for a country to develop economically, good infrastructure must be in place as well as for business to grow; businesses need viable infrastructures to be able to compete favourably in both domestic and international markets. Participants also emphasised that government support is necessary for a boost in their daily business. See the report below:

- *"Infrastructure in the oil and gas industry in Nigeria is developing moderately with new major pipelines. Also the commercial facets are also being handled. In the company that I work the benefit of such growth is a welcome development, this is because we need to find the gas, explore it, develop it, and produce it; we also need the proper infrastructure to transfer the gas to its ultimate destination. Gas can be used for power plants domestically and for liquefied natural gas in the offshore market. This we need to work and develop fast."(P2 IF2)*

- *"It is very sad that destruction of oil and gas infrastructure, other illegal activities such as piracy of crude oil and amateur refining have contributed to an obvious decrease in production levels, causing delay to projects execution and loss of government revenue. These illegal acts also have serious environmental issues. Also security threats that can lead to increase of both development and operating costs when comparing it with many other operating environments globally. Conclusively, having a safer operating environment and or good infrastructure in place will go a long way helping our business locally and globally." (P4 IF4)*

- *"From my own perspective and understanding, public benefits like roads, railways, air transport, telecommunications, electricity and water supply as business development infrastructure can create an enabling environment for business to grow, increase productivity and improve citizens' welfare. More so, having a standard infrastructure in Nigeria will influence profitability reviews for investors." (P6 IF6)*

4.3.3   Local environment

Findings from the studies also indicate that local environment is the combination of local policies and local infrastructure. And that to develop competitive oil and gas based industry; competitiveness among suppliers should be encouraged. This environmental background is really the same for any country with passion to develop oil-related businesses. Some

participants stated that financial institution has a big role to play in helping indigenous firms and enhancing local environment for good business. Some said these:

- *"Despite recent efforts by the government, the Banking regulatory environment remains challenging for local businesses to obtain a loan. I think the banks are not still not equipped enough to supply needed funds to businesses. The government should look into this and make more funds available for businesses." (P2 IF2)*

- *"The government has recently introduced some set of policies that helping local firms to gain better grounds and an enabling environment for investors. I will like that this be the first of many to come. We need such laws that mandate the IOCs to work with local firms this way the local businesses too can grow." (P3 IF3)*

- *"The government is losing money by not empowering the local firms financially. The Nigerian oil and gas industry require fundamental actions to address the key challenges of perennial and severe funding shortfalls, which have significantly impacted the growth and development of the industry and consequently production and revenue to the government and industry operators. Other concerns are lack of conducive business and operating environment which promotes overlaps and inefficiency in regulation, and imposition of multiplicity of fees and levies by government agencies; unduly long contracting processes and approval cycle times; security issues as well as crude theft and pipeline vandalism. As I earlier mentioned, we should not be discouraged but rather seize the opportunity to lay the foundation for a solid future for the industry and the country." (P4 IF4)*

- *"We are still in an unstable bank lending environment for companies to borrow on the back of an authorised development plan or existing production. Therefore, new field developments for independents and indigenous companies most likely will be limited and take time to reach Final Investment Decision (FID)." (P5 IF5)*

- *"It is a difficult environment for the oil and gas sector, especially with the recent fluctuations in price. It is really challenging at the moment but hopefully thing will turn out for the better and we have the good days back." (P6 IF6)*

- *"It is a crucial environment for the Nigerian oil and gas sector. Banks need to have various portfolios with exposure to different projects across sectors. Although Nigeria is an oil-based economy, with oil and gas providing the bulk of foreign exchange, banks should be able to give a lending hand to all indigenous companies to make local*

environment conducive for business. Support local business to grow, we are not getting such support at this moment." (P7 IF7)

- *"Business development infrastructure can create an enabling environment for business to grow, increase productivity and improve citizens' welfare. More so, having a standard infrastructure in Nigeria will influence profitability reviews for investors" (P10 KI2)*

4.3.4 Local capabilities

My findings indicate that to develop local content in the petroleum sector, there must be existing capabilities within producing, assembling and services. In other words, a successful strategy determines which existing products and services the country can generate profitably. I also found out that one of the factors that drive indigenous firms' business competition and profit is technology capability. Participants commented thus:

- *"We have been able to achieve the development of local skills, technology transfer, use of local manpower and local Assembling facility. And with our partnerships coupled with the ability to supply various pumps to Nigeria in which millions of dollar projects have been executed successfully giving us the quota booster award in 2015 has given opportunity and technology capability has given us competitive advantage in the industry." (P1 IF1)*

- *"We have a top edge technology that has enabled us to maintain less operational cost over competitors with our Crestech Engineering technology. Although Crestech Engineering has been in operation for over 10 years. Our services include conceptual studies, through front end engineering design (FEED), detailed engineering design to construction follow-on engineering, project management and construction supervision. We are also constantly beginning to provide procurement services. We are one of the leading engineering services companies in Nigeria; we provide engineering services to the oil and gas industry." (P2 IF2)*

- *"Basically, from what I said earlier our unique way of dealing with our client places us favourites among our competitive but most importantly we deliver service at the speed and quality that is not matched anywhere in the industry. We have acquired latest technology that helps us to cut cost and work fast and able to deliver to the partners." (P3 IF3)*

- *"Nigerian economy is growing and we are waiting to deliver solutions to our client's technical problems and provide project management services as the need arises. We*

have a culture that is focused on innovative and entrepreneurial management that brings effective services to our customers, through communicative synergy, with combination of efficient business and information technology systems. Having good work and diligence, will assist us to deliver on these promises via our capability." (P4 IF4)

- *"Our standard on safety and honest have propagated our image as a force to be reckon with, fundamentally, safety first in all we do; honesty, integrity and respect for people. Second, focus on the customer as king, because the customer determines our success. Third, it is expedient to remain cost effective and ensure value for money. We also aimed at creating a learning environment; therefore, training is vital. The culture we are building is highly influenced by my experience from Shell and GE. Structure is another thing where our integrated management system (IMS) comes into play. We are building a strong foundation in order to grow." (P6 IF6)*

It can be summarized from the above statements that it is important to improve learning process through industrial development, where capacity and capabilities grow via a process of solving tasks that are challenging in teamwork with leading capability globally. Learning capacity can also be improved where there is an active educational system. Two of the participants also reported the following:

- *"The strategy for us is a top notch with the result seen in the up skilling of local skills and resources. The NCDMB has oversight of these projects through constant engagement with the stakeholders. Evidences are issued via reports and other compliance documents." (P1 KI9)*
- *"There must be an industrial infrastructure to build on to be able to improve the local skills and capabilities and to narrow the gap in technology between domestic and foreign companies." (P2 KI10)*

The importance of adoption is essential because maybe the inputs from the host is not the same as for those the equipment was designed. The ability of any company to absorb the advanced technology depends on the organizational and technical capabilities of the company. The following illustrative statements highlight this.

- *"Most of our partners have set up a facility for maintenance and repairs of high-pressure subsea valves in Nigeria with our staff well trained to execute any repairs/servicing of valves in the country, this has curbed expenses of exporting valves*

overseas for repairs or bringing in expatriate in country for repairs and servicing of valves. Our technology has high accessing heights using Rope Access technique which has reduced project time, lowered downtime and minimized the impact on ongoing operations, significantly reduced the cost to clients in comparison to traditional methods. This has brought enormous benefit to our customers."(P1 IF1)

- *"According to regulatory requirement in Nigeria, capability and capacity of the indigenous companies which enable high safety and quality standards are pre-qualifications or requirements and procedures in getting contracts with my organization. Hence, the importance of local capabilities cannot be over emphasized." (P9 KI1)*

- *"In my opinion, technical capability is a requirement for indigenous firms that seek projects/contract from the IOCs. This is because IOCs considers how technically equipped a company is to take up on the jobs. Looking out for companies that are capable with the required capacity." (P10 KI9)*

Some participants from indigenous firms reported that their business strategies have given them competitive edge. This is illustrated by some of the following statements made by them.

- *"We are able to maintain competitive edge and uniqueness in the way we deliver our service and as well as our ability to match our clients with the right audience/market in real time and ensuring a successful business to business networking because of our capacity and advanced technology we use in getting our work done."(P3 IF3)*

- *"We have a unique competitive edge in this industry as being the sole-risk block unlike other firms we have no intervention from Nigerian National Petroleum Corporation and we are situated just 12 Kilo meters from the brass Export terminal and we have in imminent 10,000 bpd. Coupled with solid, Nigerian expert management we offer the public market a unique de-risked deal with low risk and high returns." (P4 IF4)*

- *"We use the short and long-term impacts reachable horizons and so far, we have demonstrated excellent service in this filed and as we settle, we will give one of best service base firms because we are going to be good as Africa is a new oil and gas frontier." (P5 IF5)*

- *"We have charged the company overtime to be at the forefront of latest methodology that carries out services fast and cheap and convincingly we have been delivering these services have aligned us in a good position with our contractors." (P6 IF6)*

- *"Effective and efficiency at high pace with equipped technology give our investors the confidence they need, the other one is, we have been focusing on utilizing, to the maximum, our resources. We're not just thinking about crude oil, but thinking about utilizing the gas and we have done very well. We have diversified our industry." (P7 IF7)*

- *"The most important thing I can say is that our engineering and Construction services in a timely and efficient manner. Customers demand efficiency. No delays, no excuses. Just deliver as promised. Our efficiency in delivery is our major selling point." (P8 IF8)*

4.3.5 Local content crucial actors and linkages

This section presents results of interviews focusing on local content crucial actors and linkages. The participants were asked to report on importance of actors for achieving local content objectives and institutions that are involved in the oil industry supply network that will help with the achievement of increased participation of indigenous companies in oil industry supply contracts. The interviews focused on:

- Financial institutions - financial constraints among indigenous companies
- R & D institutions - the government, R & D institution promoting operation of the indigenous firms in the oil and gas industry

The participants reported that financial institutions played vital roles in local firms because financial constraints among indigenous companies will hamper the supply chain in the petroleum industry. They highlighted that learning institution that is R & D and the government should help in promoting operations of the indigenous firms in the oil and gas industry so that they can be equipped financially, technically, and managerially. This is illustrated by some of the following statements made by them.

- *"Funding is one of the most demanding challenges firms in Nigeria have, this is putting a limit to the competitive ability of the local firms. With right funding sources for businesses, Nigerian firms can compete globally with ease. But in adequate funding has left most businesses stagnant and others bankrupted. If the government can make funding available to do business, I think innovative solutions powered by*

adaptable technology with adequate funding will ensure a higher success rate for Nigerian businesses in my opinion; this will go a long way in making the local economy self-sustain and also dominate globally." (P1 IF1)

- *"The government and learning institution are failing the people; I really cannot emphasize more on this position." (P1 IF1)*

- *"Despite recent efforts by the government, the Banking regulatory environment remains challenging for local businesses to obtain a loan. In my opinion, the banks are still not equipped enough to supply needed funds to indigenous firms for businesses. The government should look into this and be sure that funds are made available for businesses." (P2 IF2)*

- *"We have been clamouring for this over the years and severally we have asked. The solution is very simply, the government should equip the banks so they provide us funding as when needed. Lack of funds has closed so many businesses and liquidate grate ventures, as we all know business cycle is not linear and as such firms needs backups when those downtrends shows up. The government of Nigeria and its people should have the interest of this nation at heart and do what is right. If they equip the banks and they are strong enough we have equal capabilities to compete with Internationals firms." (P3 IF3)*

- *"Government can lose money where local firms are not financially empowered to do business. The Nigerian oil and gas industry requires fundamental actions to address the key challenges of recurrent and severe funding shortfalls, which have significantly brought setbacks to the growth and development of the industry and consequently production and revenue to the government and industry operators. Other concerns include lack of a conducive business and operating environment which promotes overruns and disorganized regulation, and imposition of multiplicity of fees and levies by government agencies; unnecessary long contracting processes and approval time; security issues as well as crude theft and pipeline vandalism." (P4 IF4)*

- *"It is a crucial environment for indigenous companies participating in the oil and gas sector as banks are not able to give a prompt lending hand to local firms, to make local environment conducive for businesses. Banks need to have diversified portfolios with exposure to different projects across sectors. Although Nigeria is an oil-based economy, with oil and gas providing the bulk of foreign exchange, supporting*

indigenous companies to grow their businesses is still challenging at this moment." *(P5 IF5)*

- *"On this issue we need the president and CBN Governor to address it as soon as possible, as indigenous companies do not get the necessary financial support from banks. Challenges in the industry include; dilemma in raising long term, competitive capital funds for projects that are capital demanding. Lately, previously active European commercial banks have either reduced their investments in Sub-Saharan Africa, or have completely removed out of the region and at the same time; the participation of African commercial banks in trade finance has declined. This means Nigerian firms don't have where to turn to for help and which every business need from time to time." (P6 IF6)*

- *"The Government and financial institutions need to make solid and enviable platforms that make funds available for local businesses. Well sustained local business directly and indirectly makes the economy attractive for foreign direct investment. We cannot expect foreign investment into the sector when there is apathy in attracting domestic funds. Other challenges include; the plague of illegal mining, security threats, the need for qualitative human capital which has reduced following decades of the sector not been active, lack of transportation and other infrastructure to facilitate mining activities and reduce the burden currently placed on mining companies, community needs and at times over placed community expectations that tend to undermine community investor relationship." (P7 IF7)*

Few participants also reported on learning institution (R & D) and how the government is not promoting indigenous companies operations in the oil and gas industry. This can be illustrated by some of the following statements made by them.

- *"To be honest, the present state of things is not encouraging. The government has not been able to match supporting standard procedures and tools that even neighbouring West African countries gives to their local firms. We find it hard to get any form of support from government agencies, even banks application for loans are subjected to rally and paddling for months. I hope the recent proposed government reforms enact three policy documents in the oil and gas sector which seeks to ensure that viable and proven local firms have easy access to support in form of technology and finances." (P3 IF3)*

- *"The Federal Government recently said it was looking to review the fiscal terms of Production Sharing Contracts in a bid to increase its stake and I hope they make this bill to law but in general the face of research and development is still backwards compared to other nations like Saudi Arabia, Qatar and so on." (P4 IF4)*

- *"We are still in a difficult bank lending environment for companies to borrow on the back of an authorized development plan or current production. Therefore, new field developments for independents and indigenous companies will likely be limited and take time to reach Final Investment Decision." (P5 IF5)*

- *"As I understand, there has been stagnant development from this, I have not heard of any break through from any R & D department that is fully sponsored by the Nigerian government. Corruption is everywhere in this country, the attitude of back doors to do things has become a norm. I must say that I don't have any idea what the R & D department had contributed so far." (P6 IF6)*

- *"It is a sad reality that efforts in research and development in this country is still way back compare to other countries. We need to ask the relevant questions to the right people. I can categorically tell you that is hardly any support in this regard." (P7 IF7)*

- *"We have been working with foreign partners in creating some test and making hypothesis of our ideas, till date I can't say of any government support facility that aid test or have latest equipment that match the level of tests and scenarios we are currently carrying out." (P8 IF8)*

Even though most of the participants reported government is not assisting indigenous companies to grow, one thought otherwise. He observed thus:

- *"The government is making policies and regulations that will encourage indigenous firms; we are glad about the development. The problem that a lot of people are encountering is that they do not assess the direction the government is trying to lead us to. When policies are made to support businesses, business minded individuals must go out there and take what belong to them, evaluate of other oil producing countries, so as to know that they are very few oil producing nations who offer the same or better risk and return profile like Nigeria with continuous support from government. For example, we have always had incentives in terms of tax and customs duty that encouraged investors to develop the gas business, so one hopes those incentives will remain, so that there is encouragement for companies to develop gas. I earlier said the gas price has improved; it*

was lower than what it is at the moment. We are almost there, as there has been great improvement in the commercial terms to attract investors." (P2 IF2)

A participant also has this to say on the important of linkages and collaborations:

- *"The collaboration has been fluctuating to say, due to the volatility in the oil price but regardless I think we need to work in this area, we need to see more collaboration between Nigerian Local firms Oil producers in the future as intra African trade can be as large as international trade. We must promote intra-regional trade and encourage government to government contracts underlined by the private sector. This is a cause Sahara Group is passionate about and I will continue to lead the narrative." (P4 IF4)*

Chapter 5 Analysis of the Data

This chapter explains the results presented in Chapter 4. The explanation is based on the areas covered by the interviews according to the five major themes: Local policies, Local infrastructure, Local environment, Local capabilities and Local content crucial actors and linkages.

5.1 Local policies

Literature argues that range of economic sectors which also include oil and gas industry are concentrated in local policies. According to Hausmann & Rodrik, (2006), these policies include public and industrial policies that are concerned with sustainable economic development. Production process tends to require a number of coordinated policy reactions and public inputs are often larger than assumed. To increase the local content generated by local manufacturing and services companies even highly developed economies also rely on active policies as discussed by Klueh et al., (2009). For a policy to be successful in augmenting local content in the oil and gas activities and subsequently enhance industrial development, decision makers at all levels are required to share the objective of making contribution to national wealth through industrial growths (Heum et al., 2011). Therefore, a local content policy must be outlined with cautious considerations to shun damaging the opportunities for business development outside the oil sector (ibid).

According to Tordo et al., (2011), public policies could accomplish different functions such as establishing company registries, appointing norms, enforcing contracts, laws and strategies, and providing infrastructure aligned with planed local content objectives. Government can also increase necessary local skills, business know-how, technology, capital market development, wealth capture, and wealth distribution to create the conditions for indigenous companies to rise.

The results from the interviews reveal that indigenous firms are getting the expected support from the government in terms of local policies, only one key informant reported that local law and cultures affect their businesses but majority are impressed with what local policy is doing to improve their competitive advantage.

According to Veloso, (2001), government policies when making decisions regarding local purchasing and subsidies have to lead the cooperation between government and firms. This cooperation will most likely drive the economy into better conditions of well-being. To be able to monitor the process, clear explanations have to be given by the policy as to how

improvement of local content will be accounted and communicated to each company as proposed by Nwokeji, (2007). This is necessary because industrial policy constitutes an important part of government policies. Industrial policy has to mainly focus on the efforts, which could promote the participation of indigenous firms in the domestic petroleum activities, competitively. UNCTAD recommends in its report that promoting industrial linkages among domestic recourses and international investors in undertaking business activities in the country will enhance industrial development.

5.2 Local infrastructure

According to scholars, the availability of certain conditions such as information technology, local company's needs, standards, social, educational, etc. in the local petroleum industry is the primary concern of local infrastructure factor. It is necessary for information dissemination, which is one of important policy principles, to foster local content in the oil and gas industry (INTSOK, 2003). Klueh, et al. (2007) recommended the establishment of a public outreach and analysis, and said office has to:

- develop a registry of competent and qualified local vendors,
- advise locals on potentials for joint ventures and other mechanisms of cooperation with foreign companies (IOCs), and
- Support plans for local capacity building, training, and R&D. For example, major oil companies have jointly introduced portals for ecommerce, such as Trade Ranger, owned by 15 oil and petrochemical companies including BP, shell, TotalFinaElf and Equinor, and it has at present more than 1000 supplier members.

The teamwork between the government of Nigeria and the major players in the petroleum activities ought to be focused on how to involve indigenous companies with local labour. Attention must also be on how to facilitate their participation in the domestic petroleum activities without compromising quality, health, safety and environmental standards (Heum et al., 2011).

Social infrastructure is associated with social cohesion between different social groups, which reduces the chances of social disorder. A stable environment attracts foreign investments and contributions to technology transfer as termed my Heum et al., (2011).

The results from the interviews show that things have to change for good if Nigeria wants to develop; this is because they are some independents local firms that don't have the capacity to

raise equity or borrow and have had to sell or subcontract assets. Particularly, there are numerous exploration companies that do not have enough cash to finance the committed work programs under their licenses and are forced to subcontract or relinquish their exploration blocks.

Furthermore, there are some attractive new plays, such as the Ajaokuta and Dangote Refinery, and these could become a world-class area for oil and gas, but they have attracted a lot of interest. The other side of this drive for banks activity has mainly been the majors booming attractive assets. Banks activity has therefore been mainly driven by the fundraising needs of companies that ran out of money and the portfolio-building or diversification of the majors. Also, indigenous firms are adopting a new corporate development strategy focused on expanding their global presence and becoming global players offering advanced technological solutions so that their idea generations and brain storming have global perspective

Finally, findings from interviews reveal that there have been developments of recent that is worth pointing out, such as the cutting down of tax on capital equipment which has greatly encouraged and assisted many indigenous firms to acquire latest equipment and technology.

5.3 Local environment

As read from INTSOK, (2003)'s report, local policies, local capabilities, local infrastructure and the synergy among these elements are formed in local environment. One of the important variables is the large-scale budgetary environment that is decisive for the factors, which are necessary for any investment decisions such as development of domestic prices, exchange rates for the local currency, and the interest rate. For investments and business development, some particular government policies impact the environment. For example, in 1990s: UK government in the context of a strengthened relationship with the European union, moved its focus from promoting local content within the UK offshore oil and gas industry to help private investors develop export markets in a competitive environment as mentioned by Klueh et al., (2009).

Literature further argues that, to prevent the pitfalls of resource abundance, the countries must proactively establish a sound institutional structure and macroeconomic management. This is from the recent country analyses and papers specified by (IMF, 2006). It is necessary to make sure that the leading international firms continue to choose to participate in the domestic industry, because local content requirements identified in other industries seem to create a business environment that is most attractive to less efficient, high-cost investors. This is

because the less efficient have the lowest switching costs, meaning they have less to lose from selecting more expensive suppliers than more efficient producers as suggested by Heum et al., (2011).

Results of the study show that to boost the performance of local businesses and to assist indigenous firms gain recognition from other countries, there is need for a corporate and cautious change in mindset that will drive government policies, industrial and development banks policies, commercial banks initiatives and most essentially, businesses and companies running within the African Oil and Gas space. Deliberate policies should be put in place by the government and the Central Banks to facilitate trading across Africa through hedging tools for foreign currency, lower cost of funds and mechanisms to issue Letter Of Intents (LOIs), among others. If they happened to be in place, it would greatly help the Nigerian economy.

5.4 Local capabilities

Scholars say, what come to mind when local capabilities is mentioned include; education, transfer of technology, skills and expertise development and know-how and an active research and development portfolio within manufacturing and services of local companies as reported from Ministry of energy of Republic of Ghana, (2010). Industrial growth is as a result of demanding interplays between established and emerging industrial capabilities and not something can be decided by politicians as proposed by Heum et al., (2011). Notwithstanding, according to Tordo et al., (2011), many countries maintain a weak industrial base and local policies commonly maintain some measures, which permit for the preferential treatment of domestic companies. Nordås (2003) believe that local policies have to appreciate and encourage foreign firms to collaborate with local companies. In turn, this should be expected to give motivation and create dynamics that would have positive influence on the development of indigenous firms.

Results from the interview indicate that beyond educating the IOCs, the indigenous companies need to be astutely educated on the benefits of developing competencies locally; government/monitoring bodies to monitor compliance without an iota of "self interest"

Literature also argues that the importance of adoption is essential because maybe the inputs from the host are not the same as for those the equipment was designed. The ability of any company to absorb the advanced technology depends on the organizational and technical capabilities of the company as describe by Cusumano & Elenkov, (1994).

Third world countries need to develop their technological capacity, but the abilities of these countries is limited by their reliance on low level of absorption of technology (Kumar et al., 1999.). Recent research by Escribano, et al. (2009) suggested that the capacity for absorption is in fact a source of competitiveness. In other words, absorption capacity of the local company plays a crucial and important role in technology transfer process.

The results from study also explain that every organization build their strategy. What drives a company is their strategy. Depending on where their strength lies, knowing what they are good at doing will make them build their strategy around accomplishing their goals and enable them to build on their capacity and capability. Sometimes, some companies have capacity to do some projects more than others because of their strategies and value creation.

5.5 Local content crucial actors and linkages

Many scholars have recognized the importance of crucial actors and linkages in local content in the oil and gas industry (Vaaland et al., 2012; Vaaland 2015). According to Ahonsi (2012), indigenous firms should develop in skill areas that are more in tune with the needs of today's information-based and increasingly globalized economy. This is to enable SMEs owners to be more equipped to compete with skills like e-commerce, software design, telemedicine, biotechnology, marine engineering, green energy engineering, and technology. Hence, there is a need for SMEs owners to develop new models of business or comply with existing models to emphasize entrepreneurship, evaluative and critical thinking, and continuously develop skills for competitiveness so that they can favourably compete in the oil and gas industry.

Literature on indigenous firms in order word SMEs (Oyejide and Adewuyi, 2012) also discussed the importance of the linkages between oil and gas industry to the Nigerian economy. Oyejide and Adewuyi (2012) perceived the development of indigenous companies in the sector as important because they are a critical linkage between the oil sector and the rest of the Nigerian economy. Mukhtar (2013) confirmed that SMEs remain vital in the area of subcontracting for big businesses especially in spare part sourcing and construction. Oyejide and Adewuyi (2012) identified the lack of linkages between the oil sector and the other sectors of the Nigerian economy as a critical developmental problem.

Oyejide and Adewuyi (2012) further recommended the creation of these linkages through the development of local capacity to participate in the activities in the oil and gas sector. These relationships can take the form of transferring information, joint training, procurement and or purchase or sales, joint product development, loan machinery, cooperation for product or

quality development and improvement and actions to improve service delivery. Oyejide and Adewuyi further argued that to involve SMEs in the upstream and downstream oil sector would promote local management of the oil resources, protection of the environment, revenue management and land ownership.

Results from the interview indicate that funds and necessary resources should be made available for indigenous companies that are willing to do business so as to contribute to the growth of the economy.

In the research on factors that impact innovation and ability of the indigenous firms to compete favourably in the service sector, Jegede et al, (2012) observed that most oil companies are foreign multinationals and oil servicing companies in Nigeria are SMEs. They also identified that SMEs in the oil and gas sector often find themselves in a double dilemma through participating in global value chains. These SMEs simply do not have access to the necessary resources often times, also equipment, materials and professional management skills. Jegede et al. (2012) recommended innovation as highly important for the growth and sustainable competitiveness of small and medium enterprises. Age, geography, research & development, staff characteristics, and collaboration with customers and suppliers are also key variables for innovation to flourish in oil and gas SMEs as suggested by Jegede et al (2012).

The results show that information technology infrastructure is no doubt an important component that has a meaningful effect on local content development. Also, the development of local skills could be achieved through technology transfer, use of local manpower and local Assembling facility.

Chapter 6 Conclusion

The purpose of this study was to explore IOCs responsibilities to improve competitiveness among indigenous companies in Nigeria. Eight indigenous companies and two IOCs based in Delta State, Lagos State and Port-Harcourt, Nigeria participated in this study. This chapter summarises the findings and conclusions that can be reached based on the literature and interviews on five main research themes: (1) Local policies (2) Local infrastructure (3) Local environment (4) Local capabilities and (5) Local content crucial actors and linkages.

In light of the research problem identified in Chapter 1, this study explored the following main research issue: What are the responsibilities of international oil companies (IOCs) to improve competitiveness of indigenous companies in Nigeria. In exploring the main research problem, the following research questions were addressed:

1. What business strategies do indigenous suppliers use to compete favourably in the Nigerian oil and gas industry?

2. How do the IOCs or foreign suppliers connect their enterprise with the enterprise from the indigenous supplier so as to build adequate activity system and what motivate IOCs to involve indigenous companies in their value chains?

As analysed in Chapter 4, I utilized semi-structured interviews and examined participants' company documents to provide answers to the research questions.

6.1 Major Findings

Findings from the study confirmed that local policies, local infrastructure, enabling environment, local capabilities of indigenous companies, actors and linkages are important strategies to improve company profitability and growth of the economy. Oil and gas industry should not be the exclusive preserve of large enterprises or multinational companies. Indigenous firms should be empowered to be able to rise up to the challenge and contribute to wealth creation and distribution by using relevant business strategies. Local firms that create a competitive edge using their private resources can take the advantage on the industry opportunities to generate employment, reduce poverty and enhance standards of living in the society.

The findings indicate that international oil companies (IOCs) engage and train their suppliers (indigenous firms) quarterly on what they ought to know and for them to have a standard that

is accepted not only in Nigeria but globally. Thus, IOCs have often engagement with suppliers where they are able to put them through on matching standard cut across the globe.

The studies reveal that Nigerian content law (LCA) says some jobs must be done in Nigeria; such jobs cannot be taking outside the country, except in a situation where they are no proven capacity by any indigenous company to get the job done in Nigeria that is the only time such jobs can be done outside the country.

The study indicates that local training and technical institutions must have the support of the government and petroleum operators to enable indigenous firms develop the necessary capacity to compete favourably in the oil and gas industry to enhance the growth of the economy. Hence, to be able to improve local skills and capabilities and to narrow down the technology gap between domestic and foreign companies, there must be an industrial infrastructure to build on. The findings reveal that collaboration with internationally leading competence can help the learning process for industrial development so that capacity and capabilities can enlarge; this can benefit indigenous firms, investing firms and the economy at large.

In relation to actors and linkages, findings show that the importance of partnership cannot be over emphasized. Partnership is capable of achieving business success faster than via independent expansion. It is impossible to go do it alone in the industry. Through partnerships, the use of original equipment manufacturers (OEMs), technical partners, community, and with other SME to deliver projects successfully is possible. Findings show that some indigenous companies used partnerships with OEMs and technical partners to access cost effective and innovative technologies. Valuable partnerships arise from sharing resources such as knowledge, competences, connections, and intelligence. Partnerships if managed effectively have the potential to produce high-quality work due to the combined specialization of each partner in the network at a lower cost for both partners. Innovation outcomes can be enhanced by developing collaborations with partners, clients, suppliers and technical bodies.

In conclusion, the findings reveal that international oil companies' responsibilities can improve competitiveness among indigenous firms. Findings also show that local policies and local capabilities are considered the most important facilitators in local content development, followed by local infrastructure, environment, actors and linkages. Furthermore, to guarantee a better future for the Nigeria's oil and gas industry, a responsible and dynamic approach to

sustainable local content development needs to be adopted by government policy makers and upstream operators. The nation needs sound economic management, policy reengineering, good governance and a social value system that rewards hard work and creativity in order to achieve technological development. Support for local content policies must be accepted by all and should be planted in every operator's business doctrine.

6.2 Limitation and Further research

The limitations of this research and areas of future research are discussed in this section.

6.2.1 Limitation of the study

According to Simon and Goes (2013) ''Limitations are constraints that are largely beyond the researchers' control but could affect the study outcome. Limitations are essential in research as they flow from methodology and study design choices. Each option in methodology and study design has particular limitations. These limit the scope to which a research can go and sometimes affect the end results and conclusion that can be drawn. There is no research without limitations, it does not matter how well it is conducted and constructed.'' Thus, the use of a qualitative method to collect data may have introduced the researcher and participants' unfairness. This study explored IOCs responsibility to improve competitiveness of indigenous companies in Nigeria. Nevertheless, there are some limitations faced by this study as highlighted below.

The study was cross-sectional. It was limited to eight indigenous companies and two IOCs due to the limited time posed by the nature of the masters' thesis; hence not a representative of all indigenous companies in Nigeria. A larger sample may have provided more data and thus better results. Also, the limited time prevented me from using quantitative method to analyse. I would have loved to use mixed method approach, which is, qualitative and quantitative methods, so as to improve the research validity.

The setting of the study is in Nigeria, and the researcher is based in Norway and relied on face to face interviews via Skype. This might have affected the interviews.

Further limitation could be that some professionals or workers may not have possessed adequate knowledge of the oil and gas industry as expected to answer the questions or that they would want to keep some sensitive information to themselves even if they have direct answers to the questions.

6.2.2 Further research

Further research firstly, could test conceptual models more analytically on other developing oil and gas countries, probably with more interviews as this study had only 10 companies to interview due to the limited time to deliver masters' thesis, in other words a large cross-sectional study involving a representative sample to allow the generalisability of findings could be considered.

Secondly, during the interviews, many of the participants view local content from the perspective of corporate social responsibility (CSR), this could be another aspect that needs more research.

References

Abdulkabir,N.A., Shaufique F. S., Azmawani A. R., & Siong H. L. (2016). The role of local content policy in local value creation in Nigeria's oilindustry: A structural equation modeling (SEM) approach. *Resources Policy 49* (2016) 61–73. doi.org/10.1016/j.resourpol.2016.04.006

Adebayo, E. L. (2009). An institutional repository (IR) with local content (LC) at the Redeemer's University: *benefits and challenges.* First International Conference on African Digital Libraries and Archives (ICADLA-1).

Ackah-Baidoo, A. (2012). Enclave development and offshore corporate social responsibility: Implications for oil-rich sub-Saharan Africa. *Resource Policy, 37* 152-159.

Ado, R. (2013). 'Local content policy and the WTO rules of trade-related investment measures (Trims): The Pros and Cons', *International Journal of Business and Management Studies, Vol. 2, No. 1*, pp. 137–146.

Ahonsi, B. A. (2012, November). *Building the capacity of local organizations implementing economic development programmes in the Niger Delta.* Paper presented at PIND's Niger Delta Development Forum – Supporting Poverty Reduction through Partnership, Port Harcourt, Nigeria.

Amendolaigne, V., Amadou B., Nicola D. C., Francesco P., & Adnan S. (2013). 'FDI and local linkages in developing countries: *Evidence from sub-Saharan Africa',World Development,* Vol. 50, pp. 41–56.

Andy, B. (2014). Funding challenges in the oil and gas sector: *Innovative financing solutions for oil and gas companies.* Retrieved February 24, 2016, from: https://www.ey.com/Publication/vwLUAssets/EY-Funding-challenges-in-the-oil-and-gas-sector/$FILE/EY-Funding-challenges-in-the-oil-and-gas-sector.pdf

Auty, R. (2006). Improving the beneficial socio-economic impact from hydrocarbon extraction on local/regional development in Caspian economies.

Barbour RS. & Barbour M (2003). Evaluating and synthesizing qualitative research: The need to develop a distinctive approach. *Journal of Evaluation in Clinical Practice.* 9:179–186.

Balouga, J. (2012). Nigerian Local Content. Challenges and Prospects: *International Association for Energy Economics.*

Banchirigah, S. M. (2008). Challenges with eradicating illegal mining in Ghana: A perspective from the grassroots. *Resources Policy,* 33(1), 29-38.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17,* 99-120. Doi:10.1177/014920639101700108.

Bogdan, R., & Biklen, S. (2003). Research for education. *Boston: Allyn & Bacon, 1, 56.*

Burns, SN & Grove, SK. (2003). *Understanding nursing research.* (3rd ed). Philadelphia: Saunders.

Burns, J. M. (2003). *Transforming leadership: A new pursuit of happiness* (Vol. 213). Grove Press.

Business Day Newspaper. (2019). Retrieved February 1, 2019, from https://businessday.ng/companies/article/regulatory-authorities-in-oil-and-gas-advised-to-ensure-more-indigenous-companies-get-jobs/

Business Dictionary (nd).*Supplier Definition*. Retrieved March 20, 2019, from http://www.businessdictionary.com/definition/supplier.html

Bridge, G., & Le Billon, P. (2013). Oil: John Wiley & Sons.

Buur, L., Michael W. Hansen, M. Kjær, and Ole Therkildsen. (2013). *Extractive Natural Resource development: Governance, Linkages and Aid*. DIIS Report 2013: 28, Copenhagen: Danish Institute for International Studies.

Calignano, G., & Vaaland, T., I. (2018). Local content in Tanzania: Are local suppliers motivated to improve? *The Extractive Industries and Society 5* (2018) 104–113

Carlson, J. A. (2010). Avoiding traps in member checking. *The Qualitative Report, 15,* 1102-1113. Retrieved April 04, 2016 from http://www.nova.edu/ssss/QR/QR15-5/carlson.pdf

Cusumano, M., & Elenkov, D. (1994). Linking international technology transfer with strategy and management: a literature commentary. 23(2), 195–215.

Chevron, (2012). Corporatre Social Responsibility Report. Retrieved March 6, 2019, from: https://www.chevron.com/-/media/shared media/documents/Chevron_CR_Report_2012.pdf

Chevron, (2013). Expanding Horizons in Africa, Chevron Corporation, 2013

Chikezie, C. (2010): "Making the local content law work", NOG, May-June, 2010, pp.11, 17.

Condie, J. (2012). Beyond rationalisations: Improving interview data quality. *Qualitative Research in Accounting & Management,* 9, 168-193. doi:10.1108/11766091211240379

Cooksey, B.(2011a). The Investment and Business Environment for Gold Exploration and Mining in Tanzania, *Background Paper.* Africa Power and Politics, London: ODI.

Cooper, D, R & Schindler, P, S. (2011).*Business Research Methods (12 ed).* McGraw Hill Higher Education.

Creswell, J. W. (2008). Educational research. *Planning, conducting, and evaluating quantitative and qualitative research.*

Creswell, J.W. (2014), Research Design: Qualitative, Quantitative and Mixed Method Approaches, (4th edition) California: *Sage Publications Inc.*

CRITTENDEN, V. L. and CRITTENDEN, W. F. (2012). Corporate governance in emerging economies: Understanding the game. *Business Horizons, 55,* 567-574.

Deloitte, (2013). Local Content Services: *Creating Competitive Advantage in the Oil & Gas Sector.*

Deloitte (2015). Oil and Gas Reality Check 2015. *A look at the top issues facing the oil and gas sector.* Retrieved February 20, 2018, from www2.deloitte.com/global/en/../oil-gas-reality-check.html

De Oliveira, R. S. (2007). Oil and Politics in the Gulf of Guinea: *Columbia University Press.*

Dowling, R. (2010). Power, subjectivity and ethics in qualitative research. In I. Hay (Ed.), *Qualitative research methods in Human Geography.* Oxford: Oxford University Press.

Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of sexual behavior, 41,* 1319-1320. doi:10.1007/s10508-0120016-6

Ellis, S. (2003). Briefing: West Africa and its oil. African Affairs, 135-138.

Emmett, S. (2008). Excellence in Procurement: How to Optimise Costs and Add Value, Liverpool Academic Press.

Employment Law Alliance (2018). Reconciling Employment Laws with Local Content Requirements in Africa: *Focusing on Natural Resources and Extractive Industries.* Retrieved February 26, 2019, from:https://www.ela.law/Templates/media/files/Webinar_Documents/2_28_18_Africa_Webinar.pdf

Equinor (2011). Equinor annual report 2011. Impact assessment. Retrieved February 6, 2019, from: https://www.equinor.com/no/how-and-why/impact-assessments.html

Escribano, A., Fosfuri, A., & Tribó, J., A. (2009). Managing external knowledge flows: The moderating role of absorptive capacity. Research Policy 38 (2009) 96–105

ExxonMobil (2008). National content - It's the way we do business.ExxonMobil.com: ExxonMobil.

Franco, M., & Haase, H. (2013). Firm resources and entrepreneurial orientation as determinants for collaborative entrepreneurship. Management Decision, 51, 680696. doi:10.1108/00251741311309724

Ferguson, J. (2005). Seeing like an oil company: space, security, and global capital in neoliberal Africa. American anthropologist, 377-382.

Ferguson, J. (2006). Global shadows: Africa in the neoliberal world order: Duke University Press.

Flowers, P. (2009).Research Philosophies -Importance and Relevance, *Research, Leading Learning and Change* (1), Cranfield School of Management.

Garrigo. S. M. (2011). Corporate responsibility at Chevron. Utah Environ. Law Rev. 31(1), 129-134

Ghazvinian, J. (2008). Untapped: The scramble for Africa's oil: Houghton Mifflin Harcourt.

Giuseppe, C. & Vaaland, I. T. (2017). Supplier Development in Tanzania, Experiences, Expectations and Motivation. *The Extractive Industries and Society 4* (2017)385–397

Guo, H., & Cao, Z. (2014). Strategic flexibility and SME performance in an emerging economy: A contingency perspective. *Journal of Organizational Change Management, 27*, 273 – 298. doi:10.1108/JOCM-11-2012-0177

Hammersley, M., & Atkinson, P. (1995). Ethnography: Practices and principles. *New York: Routledge.*

Hansen, M. W. (2013). Reaping the Reward of Foreign Direct Investments: Linkages between Extractive MNCs and Local Firms in Tanzania, DIIS Working Paper 2013(22): 1–44.

Hansen, M. (2014). From Enclave to Linkage Economies: A Review of the Literature on Linkages between Extractive MNCs and Local Industry in South Sahel Africa, DIIS Working Paper 2014(02): 1–51.

Hansen, M. W., Buur, L., Kjær, A. M. & Therkildsen, O. (2014). The political economy of local content in African extractives: lessons from three African countries.Paper presented at: 46. Årsmøde i Dansk Selskab for Statskundskab, okt. 23 – 24, 2014. Vejle, Denmark.

Hansen, M. W., L. Buur, A. M. Kjær, and O. Therkildsen (2015). The Economics and Politics of Local Content in African Extractives: Lessons from Tanzania, Uganda and Mozambique. Forum for Development Studies: 43, 1-28.

Hansen, M. W., Buur, L., Kjær, A. M. & Therkildsen, O. (2016). The Economics and Politics of Local Content in African Extractives: Lessons from Tanzania, Uganda and Mozambique, Forum for Development Studies, 43:2, 201-228, DOI:10.1080/08039410.2015.1089319

Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy. *The Qualitative Report, 17, 510-517.* Retrieved March 18, 2019 from http://www.nova.edu/ssss/QR/QR17-2/harper.pdf

Hausmann, R., & Rodrik, D. (2006). Doomed to choose: *industrial policy as predicament*. Mimeo. Cambridge, MA: Harvard University.

Hennchen, E. (2015). Royal Dutch Shell in Nigeria: Where do responsibilities end? *Journal of Business Ethics,* 129, 1–25. doi:10.1007/s10551-014-2142-7

Heum, P., Kasande, R., Ekern, O. F., & Nyombi, A. (2011). Policy and regulatory framework to enhance local content. Kampala, Uganda.

Heum, P. (2008). Local Content Development–experiences from Oil and Gas Activities in Norway. Institute for Research in Economics and Business Administration, Bergen, Norway Working paper No 02/08.

Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case- study research. *Nurse Researcher, 20, 12-17.* doi:10.7748/nr2013.03.20.4.12.e326

Hufbauer, G., C. & Schott, J., J.(2013). Local Content Requirements: A Global Problem. Vol. 102. Peterson Institute for International Economics.

Hulbert, B., Gilmore, A., & Carson, D. (2013). Sources of opportunities used by growth mindedowner managers of small and medium sized enterprises. International Business Review, 22, 293-303. doi:10.1016/j.ibusrev.2012.04.004

IHUA, U. B., (2010). Local Content Policy and SMEs Sector Promotion: The Nigerian Oil Industry Experience. International Journal of Business and Management Vol. 5, No. 5.

INTSOK. (2003). Enhancing of Local Content in the Upstream Oil and Gas Industry in Nigeria. Norwegian Oil and Gas Partners.

International Finance Corporation. (2011). A guide to getting started in local procurement for companies seeking the benefits of linkages with local SMEs. Prepared in collaboration with Engineers Againts Poverty.

International Monetary Fund (IMF). (2006). Republic of Equatorial Guinea: Selected Issues and Statistical Appendix. International Monetary Fund.

INTSOK. (2003). Enhancing of Local Content in the Upstream Oil and Gas Industry in Nigeria. Norwegian Oil and Gas Partners.

Inubiwon, B. (2017). *Developing Small and Medium Enterprises in the Nigerian Oil and Gas Sector.* (Doctorial Dissertation, Walden University)

Irwin, S. (2013). Qualitative secondary data analysis: Ethics, epistemology and context. *Progress in Development Studies 13,* 295–306. doi:10.1177/1464993413490479

Israel, M., & Hay, I. (2006). *Research ethics for social scientists.* Sage.

IPIECA.(2011). Local content strategy, A guidance document for the oil and gas industry. IPIECA webpage: IPIECA.

Jacob, S. A., & Furgerson, S. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report,17,* 1-10. Retrieved from http://www.nova.edu/ssss/QR/

Jain, S., C. (2006). Emerging Economies and the Transformation of International Business: Brazil, Russia, India and China (Brics), Edward Elgar.

Jegede, O. O., Ilori, M. O., Sonibare, J. A., Oluwale, B. A., & Siyanbola, W. O. (2012). Factors influencing innovation and competitiveness in the service sector in Nigeria: A sub-sectoral approach. *Management, 2,* 69-79. doi:10.5923/j.mm.20120203.03

Judd, C. M., McClelland, G. H., & Ryan, C. S. (2011). *Data analysis: A model comparison approach.* Routledge.

Kapoulas, A., & Mitic, M. (2012). Understanding challenges of qualitative research: rhetorical issues and reality traps. *Qualitative Market Research: An International Journal, 15*(4), 354-368. doi:10.1108/13522751211257051

Karl, T. L. (2007). Oil-led development: social, political, and economic consequences. Encyclopaedia of energy, 4, 661-672.

Kazzazi, A & Nouri, B. (2012). A conceptual model for local content development in petroleum industry. Management Science Letters, 2(6), 2165-2174.

KINZER, S. (2008). All the Shah's Men: An American Coup and the Roots of Middle East Terror, Wiley.

Klueh, U. H., Pastor, G., & Segura, A. (2009). Policies to improve the local impact from hydrocarbon extraction: Observations on West Africa and possible lessons for Central Asia. *Energy Policy, 37,* 1128– 1144.

Klueh, U. H., Pastor, G., Segura, A., and Zarate, W. (2007). *Inter-sectoral linkages and local content in extractive industries and beyond: The case of Sao Tome and Principe.* IMF Working Papers, 1-49.

KOUDAL, P. & ENGEL, D. (2007). Globalization and Emerging Markets. In: LEE, H. & LEE, C.-Y. (eds.) Building Supply Chain Excellence in Emerging Economies. Springer US.
Kow, K. A. A. (2017). Contractual Agreements in Ghana'S Oil and Gas Industry: In Whose Interest?

KPMG. (2013). Oil and Gas in Africa: Africa's Reserves, Potential and Prospects. Retrieved January 17, 2019, from https://www.resourcedata.org/hr/dataset/rgi-oil-and-gas-in-africa-africa-s-reserves-potential-and-prospects/resource/f9dce625-fdda-45ac-b21f-206ab1acd5c0

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Lincoln, YS. & Guba, EG. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.

Lindsay, D. (1995). *A Guide to Scientific Writing,* Longman: Melbourne.

Malterud, K. (2012). Systematic text condensation: A strategy for qualitative analysis. *Scandinavian Journal of Public Health, 40, 795-805.* doi:10.1177 /1403494812465030

Manby, B. (1999). The Role and Responsibility of Oil Multinationals in Nigeria. *Journal of International Affairs,* 53(1), 281-301. Retrieved February 10, 2019, from: http://www.jstor.org/stable/24357796

Marshall, C. & Rossman, G. B. (2014). *Designing qualitative research.* (5th. ed). Thousand Oaks, CA: Sage.

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research, 11,* 1-14. Retrieved March 21, 2019 from:http://www.qualitative-research.net

Mason, J.(2002). Qualitative researching (2nd ed). Thousand Oaks, *CA: Sage Publications*.

MARULI, A. (2010). RI wants local content in automotive products increased. Retrieved January 16, 2019, fromhttp://www.antaranews.com/en/news/1263219454/ri-wants-local-content-in-automotive-products-increased

Merriam, S. B. (2009). Qualitative research: A guide to design and implementation (Revised and expanded from qualitative research and case study application in education).

McCaskie, T. C. (2008). The United States, Ghana and oil: Global and local perspectives. *African Affairs,* 107(428), 313-332.

Michael, Z. N. (2014). How international oil and gas companies respond to local content policies in petroleum-producing developing countries: A narrative enquiry. *Energy Policy* 73 (2014) 471–479

Michael, W. H., Lars, B., Anne, M. K., & Ole, T. (2016). The Economics and Politics of Local Content in African Extractives: *Lessons from Tanzania, Uganda and Mozambique, Forum for Development Studies,* 43:2, 201-228.

Miles, M. B., &Huberman, A. M. (1994). *Qualitative data analysis:* a sourcebook of new methods. Beverly Hills, CA: Sage, pp. 262.
Ministry of energy of Republic of Ghana. (2010). Local Content and Local Participation in Petroleum Activities.

Mireftekhari, S. P. (2013). Local Content Strategy, solution for successful global oil and gas projects in emerging economies (Master's thesis, Norwegian University of Science and Technology, Trondheim, Norway).

Mjimba, V. (2011). The Nature and Determinants of Linkages in Emerging Minerals Commodity Sectors: A Case Study of Gold Mining in Tanzania, MMCP Discussion Paper No. 7. The Open University and University of Cape Town.

Mojtahed, R., Nunes, M., Martins, J., & Peng, A. (2014). Equipping the constructivist researcher: The combined use of semi-structured interviews and decision-making maps. *Electronic Journal of Business Research Methods, 12, 87-95.* Retrieved from http://www.ejbrm.com/

Morrissey, O. (2012). 'FDI in Sub-Saharan Africa: Few linkages, fewer spillovers', *European Journal of Development Research,* Vol. 24, No. 1, pp. 26–31.

Morse, J., & Richards, L. (2002). Read me first for a user's guide to qualitative research. *CA, US: Sage Publications Thousand Oaks.*

Morris, M., Kaplinsky, R., and Kaplan, D. (2012). One thing leads to another: Promoting industrialisation by making the most of the commodity boom in sub-Saharan Africa. Lulu.com.

Mukhtar, S. A. (2013). Small and medium enterprises in Nigeria: Problems and prospects. *International Journal of Management Research and Reviews, 3,* 38573860. Retrieved from http://www.ijmbr.org/

Murtha, T. P. & Lenway, S. A. (1994). Country capabilities and the Strategic State: How national political institutions affect multinational corporations' Strategies. *Strategy Management. J,* 15, 113-129

Nigeria National Petroleum Corporation (2008). NNPC website.

Nigerian Content Development and Monitoring Board. (2016). Retrieved March,15, 2019 from http://www.ncdmb.gov.ng/

Nick, K. (2015). Nigeria: Local Content Update for the Oil & Gas Industry. Retrieved January 16, 2019, from https://www.energylegalblog.com/blog/2015/02/10/nigeria-local-content-update-oil-gas-industry

Nwokeji, G. U. (2007). *The Nigerian national petroleum corporation and the development of the Nigerian oil and gas industry history, strategies and current directions.* The James A. Baker III institute for public policy.

Nordås, H., Kyvik, E., & Heum, P. (2003). *The upstream petroleum industry and local industrial development: A comparative study.* The Institute for Research in Economics and Business Administration.

Obuaya, T. (2005). Local Content Implementation in Nigeria: A Road Map. Paper presented at the Nigerian Oil and Gas Conference, Abuja, Nigeria.

OECD, 2005, OECD SME and Entrepreneurship Outlook: 2005, OECD Paris, page 17. Okpara, O., J. (2009). Strategic choices, export orientation and export performance of SMEs in Nigeria. *Management Decision, 47,* 1281. Doi:10.1108/0025174091098454

Orebiyi, T. (2015). The Local Content Act 2010 And The Nigeria Oil And Gas Sector. Retrieved January 16, 2019, from https://lawyersalert.wordpress.com/2015/09/04/the-local-content-act-2010-and-the-nigeria-oil-and-gas-sector-being-a-paper-presented-by-orebiyi-temitope-at-the-csomedia-meeting-organised-by-lawyers-alert-on-the-3rd-of-september-2015-at-ajuji-hot/

Ovadia, J. S. (2012). The dual nature of local content in Angola's oil and gas industry: development vs. elite accumulation. *Journal of Contemporary African Studies,* 30(3), 395-417.

Ovadia, J. S. (2014). Local content and natural resource governance: The cases of Angola and Nigeria. *The Extractive Industries and Society,* 1(2), 137-146.

Ovadia, J. S. (2015). The Petro-developmental state in Africa: Making oil work in Angola, Nigeria and the Gulf of Guinea. London: Hurst.

Owusu, R.A., & Vaaland, T., I. (2016). Local content in the oil and gas industries in Africa: how can a weak industrial base be included in the value chain? International Journal. *Energy Section Management.* 10 (4), 594–616.

Oyejide, T. A., & Adewuyi, A. O. (2012). Determinants of backward linkages of oil and gas industry in the Nigerian economy.*Resources Policy 37,* 452–460. doi.10.1016/j.resourpol.2012.06.007

PETAN, (2010). Members Profile. Petroleum Technology Association of Nigeria, Abuja, Nigeria.

Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual Therapy 17,* 378-384. doi:10.1016/j.math.2012.03.004

Petroleum Commission (2016). Presentation on Local Content Implementation in Ghana. Presented by the Chief Executive Officer at a local content conference in Takoradi in November 2016.

Polit, B., & Beck, C. T. Hungler (2001). *Essentials of nursing research: Methods, appraisal and utilization.*

Punch, K. F. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). London, UK: Sage Publications.

Ramdoo, I. (2015). Unpacking Local Content Requirements in the Extractive Sector: What Implications for the Global Trade and Investment Frameworks.

Richards, L., & Morse, J. M. (2007). Coding. *Readme first for a user's guide to qualitative methods,* 133-151.

Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research" by Jane Ritchie and Liz Spencer in A.Bryman and R. G. Burgess [eds.] *"Analyzing qualitative data"*, 1994, pp.173-194.

Ryen, A. (2007). Ethical issues. In C. Seale, G. Gobo, J. F. Gubrium, and D. Silverman (Eds.), *Qualitative research practice.* London: Sage Publication.

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research Methods for Business Students (Vol. 5th Edition). FT Prentice Hall, London.

Shaw, E. (1999). A guide to the qualitative research process. Qualitative Market Research: *An International Journal,* 2(2), 50- 70.

Shella, A. (2018). Identifying the perceptual role of cultural distance in Norwegian-Brazilian business relationship conflict (Master thesis).

SECRETARIAT, C. (1999). Business Guide to the World Trading System, International Trade Centre UNCTAD/WTO. The Commonwealth Secretariat.

Shell (2014). Our impact on local communities: Sustainability Report 2017.Retrieved February 24, 2019, from: https://www.shell.com/sustainability/communities/working-with-communities.html

Silverman, D. (2000). Analyzing talk and text. *Handbook of qualitative research, 2(0),* 821834

Silverman, D. (2010). Doing qualitative research (3rd ed). *Sage, London*.

Simon, M. K. (2011). Dissertation and scholarly research: Recipes for success (2011Ed.). Seattle, WA, Dissertation Success, LLC.

Simon, M. K. & Goes, J. (2013). Assumption, limitations, delimitations, and scope of the study. Dissertation and scholarly Research: Recipes for success. Seattle, WA: Dissertation Success LLC. Retrieved January 23, 2019, from http://www.dissertationrecipes.com/wp-content/uploads/2011/04/Assumptions-Limitations-Delimitations-and-Scope-of-the-Study.pdf

State of the Nation Address (2016). Presented to Parliament by H.E John Dramani Mahama President of the Republic of Ghana, Thursday February 25, 2016. Retrieved February 20, 2019   from https://www.ghanabusinessnews.com/wpcontent/uploads/2016/02/SOTNGhana.pdf

Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Sage Publications, Inc.

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal, 11, 63-75*. doi:10.3316/QRJ1102063

Susan, W. (2018). Small Business: SME Definition (Small to Medium Enterprise). Retrieved March 20, 2019, from: https://www.thebalancesmb.com/sme-small-to-medium-enterprise-definition-2947962

Taiwo A., O. (2015). A Legal Analysis of Production Sharing Contract Arrangements in the Nigerian Petroleum Industry. *Journal of Energy Technologies and Policy.* ISSN 2224-3232. Vol.5, No.8, 2015

Thomas, E., & Magilvy, J. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing,16, 151-155.* doi:10.1111/j.1744-6155.2011.00283.x

Total, (2005). Yemen LNG Project: The Technical Training Story. Retrieved March 6, 2019.From:http://www.shtokman.ru/f/1/career/universities/sht_training/Total_YLNG_Eng.pdf

TORDO, S., TRACY, B., and ARFAA, N. (2011). National Oil Companies and Value Creation.

Tordo, S., Warner, M., Manzano, O., and Anouti, Y. (2013). Local content policies in the oil and Gas sector: World Bank Publications.

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work, 11,* 80-96. doi:10.1177/1473325010368316

Tullow Ghana Limited (2016). Presentation on Local Content Journey presented in a local content conference in Takoradi in November 2016

Turner, D. W. (2010). Qualitative Interview Design: A Practical Guide for Novice Investigators. The Qualitative Report, 15(3), 754-760. Retrieved Macrh 10, 2019 from:https://nsuworks.nova.edu/tqr/vol15/iss3/19

UNECA, (2013). Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation, Addis Ababa: United Nations Econmic Commission for Africa

UNCTAD, (2010). Creating Business Linkages: A Policy Perspective, New York: United Nations Publication.

UNCTAD. (2013). Commodities and Development Report: Perennial Problems, New Challenges and Evolving Perspectives. New York/Geneva: United Nations publication.

Unluer, S. (2012). Being an insider researcher while conducting case study research. *Qualitative Report,* 17, 58. Retrieved March 10, 2019 from: http://tqr.nova.edu/

Vaaland, T. I., Soneye, A.S.O., and Owusu, R.A. (2012). Local content and struggling suppliers: A network analysis of Nigerian oil and gas industry. *African Journal of Business Management Vol.* 6(15), pp. 5399-5413,

Vaaland, T. I. (2015). Petro-stimulated Corporate Citizenship in Developing Countries.*The Journal of Corporate Citizenship Issue 59*. DOI: [10.9774/GLEAF.4700.2015.se.00007]

Veloso, F. (2001). *Local Content Requirements and Industrial Development Economic Analysis and Cost Modelling of the Automotive Supply Chain.* Doctor of Philosophy in Technology, Management and Policy, Massachusetts Institute of Technology.

VISMEH, A. (2011). New views of SadeghZibakalam about nationalizing oil industry in Iran. khabaronline, March 17, 2011.

Walker, J. L. (2012). Research column: The use of saturation in qualitative research. *Canadian Journal of Cardiovascular Nursing, 22, 37*-41. doi:10.1007/s10545015-9881-1

Wallace, M., & Sheldon, N. (2015). Business research ethics: Participant observer perspectives. *Journal of Business Ethics, 128,* 267–277. doi:10.1007/s10551-014-2102-2

Warner, M. (2007). Community Content: The Interface of Community Investment Programmes with Local Content Practices in the Oil and gas development Sector. Briefing

Note 9, London: ODI Retrieved February 2, 2019 from https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2087.pdf

Weijermars, R. (2010). Value chain analysis of the natural gas industries Lessons from the US regulatory success and opportunities for Europe. Journal of Natural Gas Science and Engineering, 2, pp. 86-104.

World Bank (2016). Local Content in Oil, Gas, and Mining.Retrieved January 21, 2019 from http://www.worldbank.org/en/topic/extractiveindustries/brief/local-content-in-oil-gas-and-mining

World Trade Organization (2014). International Trade Statistics. Retrieved March 14, 2019 from: https://www.wto.org/english/res_e/statis_e/its2014_e/its2014_e.pdf

Yin, R. (2003) Case study research: design and methods, (3rd ed.), Thousand Oaks,*CA, Sage Publications.*

Yin, R. K. (2014). Case study research: Design and methods, (5th Ed.). SAGE Publications: Thousand Oaks, CA.

Appendices

Appendix I: Interview guide

I.   Self introduction to the participant(s).

II.   Answering of questions and concerns of participant(s).

III.   Giving participant assurance on confidentiality.

IV.   Turn on the audio recording device.

V.   Follow procedure to introduce participant(s) with pseudonym and coded identification; note the date and time.

VI.   Start interview with question number 1; follow through to the last question.

VII.   Follow up with more questions.

VIII. End interview series; discuss member-checking with the participant(s).

IX.   Give thanks to the participant(s) for their part in the study. Repeat contact numbers for follow up questions and concerns from participants.

X.   The End.

Appendix II: Interview Questions: Indigenous Companies (SMEs owners and employees):

i.   The company's Background

ii.   What motivate you to venture into the oil and gas industry

iii.   Which companies do you provide products/services to?

iv.   What business strategies do you apply in order to be profitable in your business?

v.   How do you establish, deliberate and share a successful business plan? Is it documented, assigned department or group of staff manage the process?

vi.   What are the factors that drive your business competition and profits? By this I mean how do you compete favourably in your business and meeting your goals?

vii.   In what ways is the government, R & D institution promoting your operation in the oil and gas industry?

viii. How has Nigerian's local content law increased the opportunities for SMEs' participation in the oil and gas industry?

ix.   How do the oil and gas industry actions influence your business?

x.   How can financial constraints among indigenous companies involved in the petroleum supply chain be solved?

xi.   To what extend do you think that IOCs operations/responsibilities improve indigenous companies' competitiveness?

xii.   What else would you like to share about your experience of becoming a successful business owner in the oil and gas industry?

Appendix III: Interview Questions: Foreign Companies (IOCs). (Project Manager & Business Developer)

i.   The company's Background

ii.   How many years have you been working as a project manager/planner (country manager)?

iii. Categories of Nigerian indigenous companies engaged

iv.   What are the factors that motivate you to engage these indigenous companies?

v.   What is the pre-qualification, requirements and procedures in getting contracts?

vi.   What is the tender process?

vii. What is the role of IOCs in training of local entrepreneurs/suppliers?

viii. To what extend do you think that IOCs operations/responsibilities improve indigenous companies' competitiveness?

ix.   What is your experience regarding local content in international projects?

x.   To what extend do you find it hard to involve local supply chain in your projects?

xi.   Do you have projects specifically reserved for Nigerian firms or they compete with other international companies?

xii. How do you convey available contracts to interested firms?

xiii. What are the impacts of the country Local content laws on projects?

xiv. Are the local content expectations described in the contract or in another way (Trade law)?

xv.   How do you see local content strategy in an organizational context?

xvi. Is your company having any strategy to managing LC expectations?

xvii. What are the factors hampering local content development in Nigeria?

xviii. What are the ways to ensuring local content in international project in Nigeria?

xix. Any final comments?

Dear X,

I am Ojonugwa Catherine Emmanuel, a master student at University of Stavanger, Norway seeking an MSc of Business Administration degree with specialization in Strategy and Management. I am asking for your help in gathering data towards the completion of my masters' thesis. In the conduct of this research, I am seeking to know how local content acts and IOCs responsibility have enhance competitiveness in indigenous companies operating in oil and gas sector in Nigeria. Your input will provide relevant understanding in answering my research question

1)   What business strategies do indigenous suppliers use to compete favourably in the Nigerian oil and gas industry?

2)   How do the IOCs or foreign supplier connect their activities with the activities from the indigenous supplier so as to build adequate activity system?

3)   What motivate IOCs to involve local companies in their value chains?

The oil and gas industry in Africa has been largely dominated by multinational corporations or international oil companies (IOCs). Recent developments such as the divestment of assets by IOCs, granting of pioneer status incentive to indigenous exploration companies, and sale of marginal fields by the Nigerian government have presented opportunities for increased SME participation in the sector (KPMG, 2014).

The report of the Chairman and Director of Chevron Nigeria Limited (CNL) Jeff Ewing, says "CNL released its 2017 Corporate Responsibility Report. According to this report, the company invested approximately 2 billion USD in Nigerian content, while procurement of materials through Local Community Contractors (LCC) and cost of services provided by indigenous companies were 74 million and 284 million USD respectively." (leadership.ng, 2018).

These opportunities however, have not been sufficiently utilized by indigenous companies despite government and non-governmental bodies' interventions. Therefore, this study contains perspectives on the oil and gas industry from indigenous suppliers' point of view to develop strategies for increased participation and development.

It is voluntary and anonymous to participate in this research. That is to say that your decision as to agreeing or not to participate in the study will be honoured.

You may agree to participate in this study at the moment and you can also decide to stop from going further during the study. If for example you feel stressed during the study, you can decide to take a rest or stop. You may also adopt not answering questions that you feel are too personal or sensitive. Participant personal information will not be used in this research.

Participating in this study is evidence that you will be asked the following:

• To review the interview questions before the scheduled interview date and time.

• Participate in a 30 minutes face-to-face interview via Skype or WhatsApp.

• Provide copies of documents related to successful projects strategies such as annual business plans, strategy documents, and records that your organization is comfortable to share.

• Participation in reviewing the researcher's summary of the interview to ensure accuracy of data, which may take approximately 25 to 30 minutes. Your participation will be helpful and the time you spend will be appreciated greatly.

You are free to contact me at oc.emmanuel@stud.uis.no or 47925***57 in case you want any clarification.

Kindest regards,

Catherine Ojonugwa Emmanuel.