Strategic Alliances in the Nigerian Oil & Gas Industry: Implications for Local Capacity Development

By

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A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Business Administration (DBA)

WARWICK BUSINESS SCHOOL

University of Warwick

August 2021

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Acknowledgements

My heartfelt appreciation goes to my supervisor, Professor Pinar Ozcan, whose invaluable and immeasurable guidance, and experience contributed significantly to the successful outcome of this research.

In addition, I would like to thank the academic staff of the Warwick Business School for the foundation given throughout the taught elements of the programme.

I am also grateful to all study participants, whom I cannot name for confidential reasons, for their time as well as their open and honest submissions.

To MOJ, who pointed out the value of choosing WBS, I say a big thank you.

Finally, I thank God for giving me the strength and capacity to go through what has become one of the most remarkable journeys of my life.

Declaration

The author declares that this thesis is his own work and has not been published before. This thesis has not been submitted for a degree at any other University.

Abstract

Strategic alliances between firms have become a key strategic consideration. Alliances are the pooling of specific resources and skills by the cooperating organizations in order to achieve common goals, as well as goals specific to the individual partners. The Nigerian oil industry has largely been dominated by foreign firms, with local companies only beginning to become more prominent in light of renewed emphasis on local content development. Still, capacity development in the industry is not progressing at the required pace. The purpose of this research is to understand why progress has been at a slow pace post-regulation and put forward solutions that can bridge the gaps or address the challenges.

This study examines how strategic alliances in the upstream service sector of the Nigerian oil and gas industry can aid the actualisation of local capacity development. It discusses the strategic alliance formation process, motives, classification, risks, and success criteria. The study examines the state of alliances and capacity development in the Nigerian oil and gas industry before and after the enactment of the Nigerian Oil and Gas Industry Content Development (NOGICD) Act in 2010. Participants were drawn from existing service companies with experience in alliances, as well as the regulator.

The study argues that access to resources, learning and knowledge/technology transfer should be the motive for strategic alliances in the industry. Critical success factors for local capacity development are outlined to include the promotion and formation of equity alliances, enforcement of regulation, transparency, access to funding, shorter tendering cycle, trust, and attractiveness of local companies to foreign firms for partnership purposes.

This study contributes to theory and practice via a set of proposed solutions for the regulator and practitioners, and applicability to other settings. These contributions bring to light a specific type of alliance (equity alliance) that can lead to capacity development in a less institutionalized setting like the Nigerian oil and gas industry, whilst shedding more light on the role that regulators and local companies need to play in the alliance formation process. The contributions also show how corporate political activity could be relevant to the strategic alliance formation process by influencing the desired changes to current regulation as well as the enactment and enforcement of the right policies.

1.0 INTRODUCTION

Oil is one of the world's most valuable natural resources and it has become the lifeblood of many nations. In Nigeria, oil is the key to understanding the political and economic situation in the country, making up 90% total exports and 80% of revenue. Nigeria has a huge population and abundant natural resources, especially hydrocarbons, which were discovered in 1956. The discovery was made by Shell-BP, at the time, the sole concessionaire. Nigeria however joined the ranks of oil producers in 1958 when the first oilfield came on stream, producing 5,100 barrels per day (Asiodu, 1993). Exploration rights in onshore and offshore areas adjoining the Niger Delta were then extended to other foreign companies. Further exploration and production activities were hampered between 1967 and 1970 when the country was ravaged by the Biafran civil war caused by the attempted cessation of the Eastern provinces from the rest of the country (https://nnpcgroup.com/NNPC-Business/Business-Information/Pages/Industry-History.aspx). The end of the Biafran war in 1970 coincided with the rise in world oil prices, and Nigeria was able to reap instant riches from its oil production, with production increasing significantly in the following years.

In 2014, Nigeria produced more than 1.9 million barrels of oil per day to rank as the 11th largest oil producer in the world and the largest producer in Africa (investopedia.com, 2020). The country produced around 2 million barrels per day between 2015 and 2019. Fluctuations in annual oil production, especially since 2005, can be attributed partly to security problems connected to violent militant groups in the country. The state-owned Nigerian National Petroleum Corporation (NNPC) is responsible for regulating Nigeria's oil and gas sector, as well as developing its oil and gas assets. However, the NNPC relies heavily on international oil companies to fund development and provide expertise. Most large onshore oil production operations in the country are operated as joint ventures between the NNPC and private oil firms, with the NNPC as majority owner. Comparatively costly and complicated offshore and deep offshore oil developments are typically organized under production-sharing contracts. The terms of these contracts can be adjusted to provide appropriate incentives to international operators.

1.1 **Situation Review**

The upstream sector of the Nigerian oil and gas industry (exploration, production, recovery etc.) is the single most important sector in the country's economy. Set up in 1977 through the merger of the Nigerian national Oil Company and the Ministry of Petroleum Resources, the NNPC and its subsidiary companies dominate and have close control over all sectors of the oil industry (and by extension, the national economy), from exploration and production, to refining, petrochemicals, pipelines, marketing, distribution, and foreign sales. The NNPC is responsible for regulatory and control functions, determining oil prices, conducting Nigeria's relations with OPEC and other foreign governments regarding oil and gas, while at the same time pursuing policies as a commercial body to exploit the oil and gas resources in Nigeria.

Outside the NNPC, international exploration and production companies, as well as the international Engineering, Procurement and Construction (EPC) companies also dominate the upstream sector. The largest global oil companies operating in Nigeria include Chevron, Exxon Mobil, Shell, Total, and Eni. The most dominant international EPC companies operating in Nigeria include Saipem (an Eni Company), Samsung Heavy Industries, Daewoo Engineering and Construction and Subsea 7. The service sector (where most Nigerian companies in the industry operate) consists of businesses that provide specialized services supporting the exploration and production efforts. The upstream sector of the industry is regulated mainly by three government agencies: the Department of Petroleum Resources (DPR), National Petroleum Investment Management Services (NAPIMS) and the Nigerian Content Development and Monitoring Board (NCDMB). The roles of these regulators are summarized in Table 1.1.

It is well documented that unless societies create surplus above immediate needs, they cannot invest and grow (Porter, 1991). The failure of the Nigerian state to translate its vast oil and gas resources into national and regional greatness is a case in point (Akinola, 2018). So how can the Nigerian society, through oil revenues create a surplus, which is above normal for the risk class in which it operates? The thinking here is that Nigerian companies must get heavily involved in various segments of the oil industry for the wider Nigerian society to benefit. Increasingly, such participation in Nigeria is taking the form of alliances between local companies and much larger multinationals, with the former usually serving as commission agents, rather than significant players.

Department of Petroleum Resources (DPR)	▪ Supervising all petroleum industry operations being carried out under licences and leases in the country. ▪ Enforcing safety and environmental regulations and ensuring that those operations conform to national and international industry practices and standards. ▪ Keeping and updating records on petroleum industry operations, particularly on matters relating to petroleum reserves, production and export of crude oil, gas and condensate, licenses and leases as well as rendering regular reports on them to Government. ▪ Advising Government and relevant Agencies on technical matters and policies which may have an impact on the administration and control of petroleum. ▪ Processing all applications for licenses to ensure compliance with laid-down guidelines before making recommendations to the Honourable Minister of Petroleum Resources. ▪ Ensuring timely and adequate payments of all rents and royalties.
National Petroleum Investment Management Services (NAPIMS)	▪ Managing the Federal Government's investment in the upstream sector of the Oil and Gas industry. ▪ Enhance the Margin accruing to the Federal Government through effective supervision of the Joint venture companies, Production sharing companies and Service Companies. ▪ Adequate supervision of Budgets and Performance and ranking of projects that give higher returns on investment to the Federal Government. ▪ Engagement in the direct exploration of the frontier and inland basins.
Nigerian Content Development and Monitoring Board (NCDMB)	▪ Mandated to realize the aspirations of the Federal Government to increase indigenous participation in the oil and gas industry. ▪ Responsible for developing, monitoring, and implementing programs to ensure a steady growth of Nigerian Content in the oil and gas industry. ▪ Opening the oil and gas industry to involve the Nigerian people. ▪ Cementing access to oil fields for higher productivity ▪ Building capabilities in Nigeria to support increased investment in the industry.

Table 1.1 - The role of regulators in the upstream sector of the Nigerian Oil and Gas industry

Over the years, the practice in Nigeria has been to bring in foreign companies to carry out major projects across the length and breadth of the oil industry, without due consideration to the development of local expertise or even meaningful, permanent investment in the country.

In recent times however, the emphasis has shifted to local content development, via training & development of locals, technology/knowledge transfer and investment in developing local capacity. This has the objective of not only placing Nigerians in a position to actually participate 'seriously' in the industry, but also to position the country as a hub for the supply of technology, services and human resources for oil & gas development in the West African sub-region, and Africa in general.

However, given that there was no clear regulation to begin with, the current environment post-regulation presents a great setting to study the institutional effects of a major change that is happening within the context of the Nigerian oil and gas industry i.e., the introduction of regulation. This notwithstanding, given that the introduction of regulation has not fully achieved the desired objectives, there is a need to delve deeper into the root causes and proffer solutions. This has led to my research question *"how can strategic alliances be used to develop local capacity in the Nigerian oil and gas industry?"* This question is of particular significance not only for the specific setting in question, but also across other environments as it helps address a more general but crucial issue of developing locally sustainable capacity.

1.1.1 ***The Nigerian Oil and Gas Industry Content Development (NOGICD) Act***

The Nigerian Oil and Gas Industry Content Development (NOGICD) Act (The Act) was passed into law in 2010 with the primary purpose of increasing and building human capacity, develop local expertise, establish local infrastructure, and increase indigenous participation in the oil industry. Previously, the Nigerian Content Division (NCD) was a part of NNPC established in 2006 to achieve the following goals (i) to achieve 45% local content in oil and gas spend by 2006; (ii) to achieve 70% local content value in the provision of materials, services and equipment to the local oil and gas industry by 2010; (iii) to create an economic engine for growth, driving employment, wealth creation and improved linkage between the Oil and Gas industry and other sectors of the Nigerian economy. But following the inability of the Nigerian Content Division of NNPC to ensure compliance or to implement and enforce Nigeria content policy in oil and gas industry, the Nigerian Oil and Gas Industry Content Development (NOGICD) Act was signed into law on April 22, 2010. The Nigerian Content (NC) Act 2010 (as it is called in short) established the Nigerian Content Development and Monitoring Board (NCDMB), vested with the responsibility to implement the provisions of the Act, make procedural guidelines and monitor compliance by operators within the oil industry. The Act established a Nigerian Content Development Fund managed by the Board and funded through a 1% deduction at source of every contract awarded to any operator, contract, subcontractor, alliance partner or any other entity in any project, operation, activity or transaction in the upstream sector of the industry.

The Act also has a schedule detailing minimum levels of Nigerian content in different areas of Oil & Gas operations. There are 17 categories which are further divided into 280-line items covering virtually all areas of operational activities. The main focus areas for implementation by the NCDMB include; (i) training and employment of Nigerians; (ii) promoting indigenous ownership of marine vessels, offshore drilling rigs, etc.; (iii) establishment of critical facilities such as pipe mills, dry docking and marine facilities, pipe coating facilities; (iv) integration of indigenes and businesses residing in oil producing areas into mainstream of industry economic activity; and (v) promoting services which support industry activities such as banking, insurance, legal, etc.

Under the "Preferred Consideration" for Nigerian companies of the Act, bid processes and contract awards must now consider and reward Nigerian content. "First consideration" is to be given to Nigerian independent operators in the award of oil blocks, oil field licences, oil lifting licences and all projects for which conditional contracts are to be awarded in the oil and gas industry. "Exclusive consideration" is to be given to Nigerian indigenous service companies for prescribed contracts/services (as set out in the Act's Schedule), where such companies demonstrate sufficient ownership of equipment, Nigerian personnel, and capacity to perform such operations (Ihua, 2010). The Act specifies minimum levels or thresholds of Nigerian content for any 'project' to be carried out in the Nigerian oil and gas industry (as per Schedule to the Act which shows a list of operations and corresponding content, ranging from 45 percent to 100 percent). If a project description is missing from the Schedule, the Board has the right to set the minimum content requirement (Abolfazi and Behrouz 2012; Daniel, 2013; Izeze, 2013).

Yet without the right knowledge (largely resident with experienced foreign companies) transferred to local companies, The Act may not realize its objectives. On one hand, there are several foreign companies with the required expertise and technology, who are reluctant or unwilling to expand into such markets like Nigeria due to both perceived and real difficulties in the operating environment as well as little or no understanding of the terrain. Local companies either wishing to take advantage of The Act or simply build sustainable businesses in the industry also face huge challenges in attracting foreign partners that can aid their learning. On the other hand, there are foreign companies willing to enter such new, challenging but growing markets, who need credible local companies to help navigate the perceived troubled waters for mutual benefits. As such, alliances look like the only pragmatic way through which local companies can develop capacity and through which foreign companies can comply with The Act.

Still, several obstacles exist in attracting foreign companies with some of the required technologies and expertise. Trust, credibility, and corruption are some of the biggest barriers. It has been documented that resource-rich countries tend to perform poorly in terms of economic development despite their natural wealth, a "resource curse" that some have partly attributed to high levels of corruption (David-Barrett and Okamura, 2016). Other barriers include security concerns and sometimes, unfavourable, or unclear government policies. Motives for collaboration are also generally unclear. The process of the alliance formation, execution, expectations, compatibility of partners and success criteria are also not necessarily well defined, thereby leading to dissatisfaction from one or more parties. Most would-be partners seem not to have fully explored and understood the associated risks or separate perception from reality. This may explain why very few alliances can be deemed to be successful in the Nigerian oil industry, with even fewer equity alliances. Without overcoming these obstacles, it will be difficult to form the right partnerships that will aid the development of local capacity in the long-term. The subject of strategic alliances has therefore become a significant consideration for firms wanting to achieve what they may otherwise not be able to achieve on their own. Yet previous work specifically relating to alliances within the Nigerian oil and gas industry is difficult to come by. This poses a challenge as well as an opportunity for significant scholarly and practical contribution to an industry where emphasis on local capacity development is causing a gradual shift in paradigm; an opportunity that the research question at the heart of this study *"How can Strategic Alliances be used as a tool to develop local capacity in the Nigerian Oil & Gas industry?")* aims to exploit.

This study therefore aims to create fresh knowledge and develop new insights into strategic alliances within the Nigerian Oil and Gas industry, while aiding the achievement of the overall objective of the NOGICD Act (2010) to develop local capacity.

Prior research has covered the formation, classification, implementation, and management of strategic alliances (Harrigan, 1988; Lorange et al, 1992; Doz, 1996; Gulati 1998; Lawrence and ul-Haq, 1998; Archbold, 2000, Christ, 2016; Andersen, 2015; Wandebori, 2018; Panova, 2018). Much has also been written on the benefits of strategic alliances (Lynch, 1989; Coviello and Munro, 1995; Rygh, 2018). Some have looked extensively at alliance outcomes and the initial characteristics of the alliance or its partners (Kim and Gutierrez-Wirsching, 2019; Burgers, Hill and Kim, 1993; Hagedoorn and Schakenraad, 1994; Hamel, 1991, Zhao et al, 2020; Robson et al, 2019). Others identified important motives for entering inter-firm alliances (Das and Teng, 1998; Kogut, 1991; Badaracco, 1991; Oliver, 1990).

Regardless of the vast coverage given to strategic alliances in literature in general, literature on alliances regarding the Nigerian oil and gas industry is hard to come by. Yet the subject remains a major strategy consideration for many firms. In this study, I examine how strategic alliances in the Nigerian oil and gas industry can aid the actualisation of local capacity development initiatives, following the adoption of the Nigerian Oil and Gas Industry Content Development Act 2010, which primary purpose is to increase and building human capacity, develop local expertise, establish local infrastructure, and increase indigenous participation in the oil and gas industry. Existing literature is used to understand different types of alliances, how alliances are formed, motives behind alliances, the risks involved and how to mitigate those risks. Two different but interlinked theories (resource-based view and knowledge-based view) are used in this paper to gain further insights into the subject of strategic alliance within the Nigerian oil and gas industry context. These provide a firm basis for comparison with general practice in the Nigerian oil industry, together with the desired type of alliances. These two theories are considered most relevant because both focus on resource and knowledge sharing and acquisition as alliance motives, which are considered central to the achievement of local capacity development within the industry.

This study also examines the dominant alliance types in the Nigerian oil and gas industry before and after regulation, motives behind such alliances and associated risks. It goes on to argue that learning and knowledge/technology transfer, via equity alliances should be the most dominant motive for local companies forming alliances with foreign firms in order to develop local capacity. The study shows that clearly defined and favourable government policies, together with the enforcement of regulations are paramount to the actualisation of effective alliances and local content initiatives. Finally, this study provides a framework for practitioners and regulators for successful alliance formation as a tool for local capacity development in the industry.

The findings of this study make significant contributions to existing literature, to the researcher's own organisation, industry regulators, policy makers as well as international and indigenous operators by illuminating grey areas on the subject and proffering solutions. Existing literature on alliances have typically been in the context of developed countries and clear and well-functioning institutional environments. When those are not the case, alliances can function very differently and may be completely inhibited by the lack of institutional clarity and support. The findings in this study show ways in which alliances can be formed and function in developing and lower institutionalized settings. Prior literature also did not shed light on the role regulation and regulator can play in the alliance formation process. This study provides further insights not previously covered, into the role of the regulator in fostering a conducive environment for alliance formation and local capacity development via the effective monitoring and enforcement of appropriate policies. The study exposes the gap between the desired outcome of regulatory changes and reality, identifies equity alliances as the path to local capacity development, and proposes solutions to the identified bottlenecks to such alliance formation. Some of the solutions put forward in this study include the need for the regulator to play a more prominent role in the local capacity development and alliance formation process by creating a more conducive environment, enforcing compliance, reducing the mandatory minimum equity threshold, reducing the tendering cycle, and making the intervention funds more accessible to local companies. Others include the need for local companies to take a longer-term approach via equity alliances and improve their standards in order to become more attractive to potential foreign partners. Finally, this study goes on to identify the role that Corporate Political Activity (CPA) can play in effecting desired regulatory changes and provides insights into the need for local companies to adopt a proactive approach towards CPA, whilst integrating CPA with their marketing strategies.

This research is expected to have far reaching impact outside the intended sector of the oil and gas industry. Although this study has focused on the upstream service sector of the Nigerian oil industry, the output and solutions can be applied to other settings involving alliances between foreign and local firms in a developing country. The lessons learned can form the basis for future research and/or applied to other sectors and industries that may wish to adopt alliances as a means of developing local capacity.

This paper is divided into 7 main parts, starting with an introduction to the Nigerian oil and gas industry, and the review of the situation for which a solution was sought. The major role that the industry plays in the overall economy of the Nigerian state is highlighted and the critical role that alliances need to play in realising local content goals are discussed. I provide an overview of the industry regulators, with emphasis on the Nigerian Content Development and Monitoring Board (NCDMB) and the objectives of the Nigerian Oil and Gas Industry Content Development Act 2010.

In Chapter 2, I describe my review of alliance literature with emphasis on two main theories: the Resource-Based View and the Knowledge-Based View. I go on to elaborate on the strategic alliance phenomenon, starting with the classification alliances into two broad categories: equity and non-equity alliances. The next section examines why firms enter strategic alliances in the first place and identifies seven core strategic motives: risk sharing, economies of scale, transfer of expertise, conforming to host government policy, international expansion, achieving competitive advantage and shaping the competition. I review the risk construct independently before examining risk in relation to alliances. Risk is then classified into three categories: relational risk, performance risk and non-alliance risk. I further examine risks with respect to the alliance formation process - selecting partners, structuring the alliance, operating the alliance, and evaluating the alliance performance. The final part of this section discusses guidelines for managing inherent risks in the alliance formation process.

In Chapter 3, I describe the qualitative, multiple case research method adopted for this study, with the research setting being the service sector of the Nigerian oil and gas industry. Drawing on theoretical knowledge discussed in the preceding chapter, the solutions design, implementation, and evaluation methods are outlined in this chapter.

Chapter 4 describes my findings which reveal the major challenges to alliance formation and local capacity development pre- and post-regulation in the Nigerian oil and gas industry. I divide my findings into pre-regulation, purpose and impact of regulation, and obstacles to the formation of the right types of alliances.

Proposed solutions and recommendations are presented in Chapter 5 in two parts: regulator and practitioners. I go on to compare my findings with literature and discuss the implications of my findings in Chapter 6 and discuss the implementation and evaluation of the proposed solutions. Finally, I provide a summary and concluding remarks in Chapter 7. The contributions of this study are grouped into four major categories: (1) how equity alliances are the route to developing real and sustainable local capacity in a less institutionalized context i.e. Nigerian oil and gas industry; (2) how the regulator can facilitate the alliance formation process via the enforcement of regulation, easier access to funding, reduction in the tendering cycle, fairness in tendering and the reduction in the mandatory minimum equity threshold; (3) how local companies can attract foreign firms for long-term alliances by improving their standards; and (4) how corporate political activity can be utilized in effecting the desired policy changes.

Collectively, these contributions go on to provide the answers to the research question in this study i.e. *"How can Strategic Alliances be used as a tool to develop local capacity in the Nigerian Oil & Gas industry?"*

2.0 SYSTEMATIC LITERATURE REVIEW

Strategic alliances between firms are now an ever-present phenomenon, with their proliferation leading to a growing stream of research by organizational and strategy scholars who have examined some of the causes and implications of such partnerships. “The greatest change in corporate culture and the way business is being conducted, may be the accelerating growth of relationships based not on ownership, but on partnership (Drucker, 1996).” Strategic alliances are defined as “the pooling of specific resources and skills by the cooperating organizations in order to achieve common goals, as well as goals specific to the individual partners” (Varadarajan and Cunningham, 1995). According to Jarratt (1998), alliances reflect the collective use of resources and cross-organizational information flow to assist alliance partners in achieving a future desired strategic position. Strategic alliance is the term used to describe the very broad range of relatively enduring interfirm cooperative agreements (Parkhe, 1991, 1993).

In a rapidly evolving world of uncertainties, and of all the trends sweeping the business landscape, few will have more of an impact on companies than strategic alliances or partnerships (Elmuti and Kathawala, 2001). This prediction has become real. But the strategic alliance making process can be messy. Alliances often take longer to forge and require more energy to sustain. Strategic alliances stand out as a high-risk strategy because a partner firm has less control over the alliance than it has over its own subsidiaries. The challenge is to keep the two parent entities separate, and yet to align their interests and achieve a high level of coordination. To most people, the spirit of competition connotes a winner-take-all attitude. Brouthers et al (2017) argued that alliances should be avoided unless there is a real need for resources. Nevertheless, in today’s increasingly diversified markets, self-sufficiency is no longer a viable option for many growing companies and industries. As free trade among countries is beneficial to all parties, the exchange of resources among companies is proving to be similarly advantageous.

The key to success is in the execution, or the management of the alliance making process and the inherent risks (Das and Teng, 1997a). Day (1995) argued that certain firms are particularly good at managing alliances, showing the necessary trust and commitment for these to work, giving such firms a significant edge over competitors. Such ability could be compared to the notion of core competencies, which are composed of the collective knowledge in an organization, and the firm's ability to coordinate different skills and technology (Hamel and Prahalad, 1990). To acquire resources, a firm must first have its own resources such as alliance competence or reputation.

Still, the subject of strategic alliances is growing in appeal to organisations because of the cost savings achieved in executing operations, risk sharing opportunities, new market penetration incentives, new learning as well as resource sharing opportunities and possible provision of much required competitive edge. Strategic alliances can therefore occur because of a wide range of motives and can take a variety of forms. Whilst such relationships can pay off, companies sometimes enter alliances without thoroughly weighing their options and this is the primary reason that many alliances fail (Elmuti and Kathawala, 2001). It is therefore imperative that companies make sure that an alliance is the best option for their needs. Companies should be clear about why they are entering the alliance (i.e., the strategic motives), the type of alliance that suits their objectives, the process to adopt to ensure a successful outcome, what they expect to gain from it and how success will be measured.

2.1 Theoretical Perspectives

There is an extant literature on the formation, implementation, and management of strategic alliances. These range from general literature on alliances, to networking and international joint ventures for small businesses. However, much of the pioneering literature goes back twenty years or more. And although there are fewer more recent publications on strategic alliances, the subject remains a black box for settings like Nigeria where not enough is known and documented with regards to the nature of alliances, especially in the oil and gas industry.

Much has been written on the structure, evolution, benefits and sustainability of strategic alliances (Inigo and Albareda, 2020; DePamphilis, 2019; Kohtamaki et al, 2018; To, 2016; Gomes et al, 2016; Castro et al, 2014; Albers et al, 2013; Coviello and Munro, 1995; Harrigan, 1988; Lorange and Roos, 1992; Doz, 1996; Gulati 1998; Lawrence and ul-Haq, 1998; Archbold, 2000, Das and Teng, 2000). Other authors have looked extensively at the relationship between alliance outcomes and the initial characteristics of the alliance or its partners (De man and Luvison, 2019; Al-Tabbaa et al, 2019; Burgers, Hill and Kim, 1993; Hagedoorn and Schakenraad, 1994; Hamel, 1991). There is also literature covering the risk and supposedly high failure rate of alliances (Christ, 2016; Anderson et al, 2014; Bleeke and Ernst, 1991; Reuer and Zollo, 2005) and the diversity of alliances and partners (Parkhe, 1991).

Different theories have been used to derive theoretical rationales for alliance formation. These range from mainstream economics orientation (Contractor and Lorange, 1988), the transaction cost approach (Panova, 2018; Rygh, 2018; Williamson, 1981, 2010; Riordan and Williamson, 1985; Hennart, 1998; Das and Teng, 200b; Tsang, 1998; Eisenhardt and Schoonhoven, 1996), explanations based on the Agency Theory (Kong 2018) and the Resource-Based View (Barney, 1991, 2001; Pfeffer and Solancik, 1978; Yasuda, 2005; Das and Teng , 2000b; Anand and Khanna, 2000; Chung et al, 2000; Hamel, 1991; Wernefelt, 1984, 1995), to the Organisation Learning Theory, (Basten and Haamann, 2018; Hamel, 1991; Dussauge et al, 2000; Hitt et al, 2000, 2001), and the Knowledge-Based View (Subramanian et al, 2018; Lammi, 2013; Grant, 1996; Gravier et al, 2008). These theories have proven useful in understanding the evolution of strategic alliances. Nevertheless, the literature does not form an all-encompassing theory of alliances but presents theories explaining alliances based on different and sometimes contradictory models. No single theoretical perspective seems to provide a full explanation of the alliance debate, thus justifying the need for a deeper examination of a combination of theories to determine relevance. While some have suggested that the generality of theories explaining alliances has resulted in weaker explanations of alliance theories (Borys & Jemison, 1989), others have postulated that the various theoretical explanations for alliance formation do overlap (Jha et al, 2019; Varadarajan & Cunningham, 1995).

Following a comprehensive review of several theoretical perspectives, a somewhat fragmented body of alliance knowledge was revealed. A risk related to this fragmented body is that theories present contradicting suggestions for firms, which could lead to confusion for practitioners when looking at literature on alliance for guidance. In addressing the research question driving this study, two theories of focus emerged, with both viewing alliances as a preferable strategy to solo operations emerged from the literature review. These are:

- The Resource-Based View, which suggests that firms use alliances to locate optimal resource configuration and to develop a collection of value-creating resources that a firm cannot create independently.

- The Knowledge-Based View, which bases the competitive advantages of a firm on the creation and integration of knowledge.

The two theories were selected because they are most suited to the formation of alliances in the Nigerian oil industry. It is opined that in addressing the research question at the heart of this study, the motive for alliances in the Nigerian oil industry should be driven by the need to create knowledge, learn new capabilities and develop resources that a local firms cannot create independently. These motives are at the heart of the knowledge-based and resource-based theories respectively. Figure 1.1 depicts the overall objective of both collaboration theories examined in this paper.

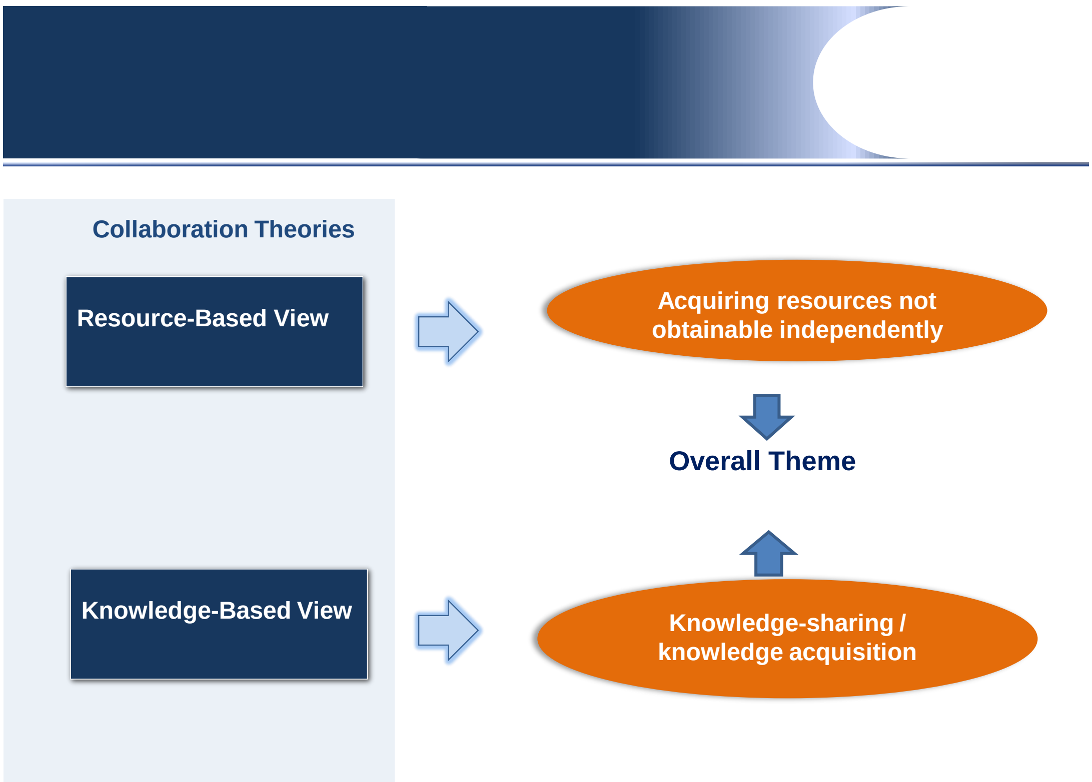

Figure 1.1 - A snapshot of two collaboration theories

These two theoretical explanations are now discussed in some detail.

2.1.1 ***The Resource-Based View***

A common perspective used to explain alliances is the resource-based view (Nagano, 2020; Zhao et al, 2020; Pfeffer and Salancik, 1978, Yasuda, 2005, Wernerfelt, 1984, 1995). As strategic alliances are essentially the result of resource integration among firms, a resource-based view has the potential to help in understanding alliances better (Das and Teng, 2000).

According to Pfeffer and Salancik (1978), most organizations are incapable of individually delivering the resources required to build competitive advantage. This is certainly true of local companies operating with the service sector of the Nigerian oil and gas industry and the need to provide answers to the research question the types of alliances can aid capacity development in the industry. The resource-based perspective suggests that the firm is a collection of heterogeneous resources (Zhao et al, 2020) i.e., tangible, and intangible assets that are semi-permanently tied to the company. The resource-based alliance formation argument suggests that firms use alliances to locate the optimal resource configuration (Nagano, 2020; Das and Teng, 2000a). Thus, alliances are used to develop a collection of value-creating resources that a firm cannot create independently. The resource-based approach therefore provides an important base for understanding the effective management of alliances. By acquiring resources and managing them, firms can create sustainable competitive advantages and impose barriers on competitors from achieving the same (Wernerfelt, 1984). The resource-based view places emphasis on internal aspects of firms and value creation (Das and Teng 2000b). Strategic alliances are thus seen as means to gain access to resources the firm might lack and must acquire to be able to continue its operations (Day, 1995). As competition becomes more global and the cost of competing in markets continues to escalate, firms find themselves lacking in resources to compete efficiently.

In their search for resources, firms must consider reaching out to other firms, either by acquisition, merger, or inter-firm cooperation. The lack of resources and the potential gains of alliances could be seen as a strong incentive for firms to form alliances (Johansson, 1995). Alliance formation can be a strategy for retaining or expanding the usage of underutilized resources (Tsang, 1998; Das & Teng, 2000b). This could be because of having a temporary excess of resources or finding opportunities to gain more from currently held resources through cooperation. Complementary resources allow larger firms to leverage their own depth of resources, and smaller firms to compensate for a lack of resources. These resources can be defined as the degree to which a firm can cover each other’s lack of resources, thus eliminating pre-existing deficiencies (Lambe et al, 2002).

In contrast to other theories such as the transaction cost theory, the resource-based view places emphasis on the internal aspects of firms and value creation rather than cost minimization (Das & Teng, 2000b). The central thrust is to extend the firm’s domain of control and this can be proxied by vertical links and risk sharing (Glaister and Buckley, 1996). Strategic alliances are seen as means to gain access to resources the firm might lack and must acquire to be able to continue its operations (Day, 1995; Lambe et al, 2002). Although resources are recognized by other theories, the resource-based view strongly emphasizes the role of resources. According to Wernefelt (1995), it is due to the discrepancies between firms' resources that firms can achieve strong competitive advantages, which are gained by holding critical resources able to provide firms with a strong strategic position. Durability, value, imitability, and rarity are resource characteristics that lead to competitive advantage (Barney, 1991). In their search for resources, firms have to reach out to other firms through a range of alliances. In this vein, alliances can be a strategy for retaining or expanding the usage of underutilized resources. While the collective strength of an alliance depends on the pool of resources, the resource-based view provides more insight into how resources are obtained. Resources are accessed either through integration or exchange (Chen & Chen, 2003). While integration is via relying on the synergy of resources which need to be built into the firm, exchange involves the use of resources from partnering firms. On one hand, resources, defined as the degree to which firms can cover each other's lack of resources to eliminate pre-existing deficiencies, can be complementary by allowing larger firms to leverage their own depth of resources and smaller firms to compensate for their lack of resources (Day, 1995). On the other hand, resources can be supplementary, referring to the resources that both alliance partners could access prior to the alliance being formed, thereby allowing the firms to pool their strengths. Lammi (2013) likened firms that are good at managing alliances to having core competencies which give them an edge over competitors. Such alliance competence, defined as the ability to find, develop, and manage alliances (Lambe et al, 2002), is paramount in creating and acquiring the resources required to succeed. A firm lacking the necessary intangible resources such as trust and reputation, will be unable to attract partner firms and may end up with less desirable partners (Day, 1995).

According to the resource-based view, alliances can also involve risks. Firms entering alliances accept greater dependency in exchange for access to resources (Gravier et al, 2008) which may lead to constrained growth for one partner. Unfortunately, the inflexibility of alliance is seen to come from the sharing of resources within alliances (Harrigan, 1988). Partners get to know each other's resources over time but if a firm's resources are eroded or imitated, the alliance may lead to a negative shift in the competitive strength of the victim. The importance of having durable and/or inimitable resources to gain competitive advantage cannot be over emphasized (Lammi, 2013).

2.1.2 ***The Knowledge-Based View***

The knowledge-based view can be considered an outgrowth of the organizational learning theory and the resource-based view. However, in contrast to the resource-based view that acknowledges several kinds of resources, the knowledge-based view only focuses on one resource: knowledge (Subramanian et al, 2018; Lammi, 2013; Grant & Baden-Fuller, 1995, 1996, 2004; von Krogh and Roos, 1999; Contractor and Lorange, 2002; Mowery et al, 1996). The goal, according to this view, is for firms to achieve the best possible fit between their knowledge domains, the knowledge the firms have and the knowledge the products require. Grant & Baden-Fuller (1995) view alliances as the means to better utilize own knowledge, while Hamel (1991) sees alliances as platforms for learning. Hence, the knowledge-based view is applicable for explaining two motives of alliance formation. According to Grant (1996), the knowledge-based view is an alternative perspective on the organization and competitive advantages of the firm. From this perspective, all productivity is knowledge-dependent, meaning the competitive advantages of a firm based on the creation and integration of knowledge (Grant and Baden-Fuller, 1995).

Kraatz (1998) found that alliances provide firms with access to information and knowledge that contribute to superior adaptation to their competitive environment. Others have suggested that alliances based on complementary resources contribute more strongly to firm learning than do alliances created to develop economies of scale (Dussauge et al, 2000). Because resource complementarity results in less overlap between partners' knowledge sets, more significant opportunities surface to learn new capabilities. Other research shows that younger startup firms greatly benefit from effective alliances, partly because of the enhanced opportunities to learn new capabilities (Baum, Calabrese and Silverman, 2000). Firms with higher levels of knowledge as embedded in their human capital, outperform competitors (Hitt et al, 2001). While it may be difficult, learning is an important outcome from alliances. Learning new capabilities may help firms implement strategies that lead to improved performance. Makhija and Ganesh (1997) suggest that even though learning may not be the primary reason to create an alliance, it is likely to be an important factor in the overall alliance success.

Knowledge itself is divided into tacit and explicit knowledge. Tacit knowledge is revealed by its application and acquired through practice, while explicit knowledge is revealed by its communication, making its transfer nearly costless. Whereas the resource-based view defines the firm's boundaries by the resources it employs, the knowledge-based view instead states the firm’s boundaries are defined by the amount of knowledge it can integrate. The knowledge-based view stresses that the utilization of knowledge is important as knowledge can be underutilized, meaning that it is going to waste. A firm that loses knowledge is losing opportunities to create competitive advantages. Thus, it is important that a firm’s knowledge domain matches the requirements of the product domain of the firm to avoid underutilization of knowledge. By either accessing and acquiring knowledge provided by others, or fully utilizing existing knowledge within the firm, firms can decrease mismatch between product and knowledge domains. Grant & Baden-Fuller (2004) concluded that the knowledge-based view is particularly appropriate for firms in knowledge-intensive environments, as these have higher rates of alliance formation.

The knowledge-based view can help in explaining two kinds of alliances in relation to knowledge sharing. One is the knowledge accessing alliance that is formed to allow better integration of a firm’s own knowledge (Kong, 2018; Grant & Baden-Fuller, 2004). This type of alliance is meant to remove the need to generate knowledge in a field not related to a firm’s core activities, with improvement in efficiency (as against knowledge acquisition) being the primary aim. Such an alliance requires transparency and cooperative attitudes between the alliance partners. The other type of knowledge-sharing alliance is the knowledge acquisition alliance, which is formed for the acquisition of knowledge that a firm might lack (Morrison & Mezentseff, 1997). Such acquisition of knowledge via the right alliances can provide some answers to the question of local capacity development within the Nigerian oil industry. Gaining the benefits of these alliances relies on the firm’s ability to learn, with the advantage that the knowledge obtained is also available to the firm post-alliance. According to Hamel (1991), transparency between alliance partners is critical to gaining access to the desired knowledge, as is the firm’s ability to identity and absorb knowledge, otherwise known as a firm’s absorptive capacity (Love et al, 2016; Cohen & Levinthal, 1990).

According to the knowledge-based view, the sharing of knowledge within an alliance involves the risk of losing that knowledge (Harrigan, 1988), meaning alliance partners must take care not to share more than necessary. That said, protecting knowledge can be difficult if a party lacks the bargaining power in an alliance. The weaker party may be forced to share more if its knowledge to keep the stronger party in the alliance. The knowledge-based view indicates that knowledge requires integration, implying knowledge acquisition alliances may lead to higher integration cost, which firms must evaluate in detail before an alliance is formed (Grant & Fuller, 2004).

The two perspectives examined in this chapter are summarized in Table 2.1.

Theoretical Perspective	**Motives**	**Advantages**	**Disadvantages**
Resource-Based View	Difficulty in developing own resources. Difficulty in competing alone. Eliminate own deficiencies. Obtain economies of scale, risk sharing, legitimacy, market power, or cost advantages. Poor access to resources via other means. Expand or retain underutilized resources.	Resources are either exchanged or integrated. Alliance competence leads to better alliance management and acquisition of resources. Alignment of resources leads to supplementary or complementary resources. Social status and reputation allow for better finding of potential partners.	Inflexibility due to shared resources. Loss of resources if alliance fails or due to internal changes. Risk of imitation and deterioration of resources. Overdependence can lead to hampered growth and surrendering of business areas.
Knowledge-Based View	Harder to compete alone due to increased competitiveness. Alliances allow for better fit between knowledge and product domains. Further development of own stock of knowledge. Eliminating own deficiencies. Obtaining economies of scale. Sharing risks and costs, especially in uncertain environments.	Intent to learn, transparency, receptivity, absorptive capacity, mechanisms, and managerial ability allow for better acquisition of knowledge. Shared equity improves knowledge transfer. Knowledge access leads to better specialization of own knowledge and interdependency. Opportunism vs. relational capital for knowledge acquisition.	Knowledge access could lead to the surrendering of knowledge through specialization and dependency. Knowledge acquisition could lead to instability and knowledge leakage. Knowledge acquisition could lead to increased integration costs and ultimately alliance termination. Alliance termination could lead dependent partner stranded.

Table 2.1 - A summary of two theoretical perspectives (adapted from Lammi, 2013)

2.2 Alliance Classification

Inter-firm alliances can have a variety of cooperative arrangements, including direct investment, joint ventures, supplier relationships, technology licensing, technology exchange, research and development, and so on. Various typologies have been proposed to classify these structures (Wandebori, 2018; DePamphilis, 2019; Alter and Hage, 1993). Doz and Hamel (1998) used company case examples of successful and unsuccessful partnerships to highlight alliance types. They discuss the dynamics of the traditional bilateral alliance, then go on to discuss the newer, more complex forms such as alliance portfolios (one partner, many alliances), alliance networks (one alliance, many partners), and alliance webs (several partners, several alliances). Doz and Hamel (1998) devote considerable discussion to critical issues on what is needed in an alliance, such as organizational culture, collaborative processes, configuration, and coordination. They also place emphasis on compatibility of partners and levels of collaboration.

Although Table 2.2 shows various basic forms of interorganizational relations appearing in literature (Todeva and Knoke, 2005), some theorists have differentiated the governance structures into two main categories: equity alliances and non-equity alliances (Wandebori, 2018; Teece, 1992; Hennart, 1988). Equity alliances involve the transfer or creation of equity ownership, and they take two forms: direct investment and joint ventures. Direct investment occurs when one of the partners acquires partial ownership of the other partner or partners. In joint ventures, partners invest in a new, jointly owned entity. According to Mowery et al (1996), equity alliances offer increased transparency and proximity in the alliance, leading to stronger, convergent, and divergent effects. From the research question in this paper, this is the desired position for practitioners in the Nigerian oil and gas industry.

Non-equity alliances on the other hand, do not involve any equity transfer, but they include all kinds of contractual arrangements. Whereas the equity alliance is closer to the hierarchy end, non-equity alliances are looser arrangements that more resemble market transactions. Non-equity alliances are considered inferior for the access or acquisition of tacit knowledge as these alliances lack the needed proximity and transparency (Mowery et al, 1996). Apart from categorizing alliances in terms of equity or lack of, the variety of alliances is explained in terms of link and scale alliances. Hennart (1988) suggests that scale alliances are alliances formed by actors within the same industry, while link alliances are across industries. To this end, scale alliances are what is required within the Nigerian oil and gas industry, where non-equity alliances have been the dominant types of alliances. The research question in this paper stemmed from the limited progress from such loose alliances with regards to local capacity development.

The choice between equity and non-equity alliances is one of the most important decisions that prospective partners are required to make (Teece, 1992). The decision has crucial implications on several aspects of the alliance: organization structure, operational process, control mechanism, and so on. A number of studies have sought to reveal the underlying rationale for determining the choice between equity and non-equity alliances (Panova, 2018; Rygh, 2018; Hagedoorn, 1993; Gulati, 1995), many from a transaction cost economics standpoint. Transaction cost theorists view inter-firm alliances as a hybrid form between two polar forms: markets and hierarchies (Rygh, 2018; Williamson, 1981). When transaction costs incurred by using the market mechanism are deemed to exceed governance costs from internalized exchanges, hierarchical organizations will be created. Conversely, low transaction costs will justify the choice of market exchanges. Inter-firm alliances serve as a flexible choice when the transaction cost involved in an exchange are too high for using market mechanism, but not high enough to form a hierarchy (Williamson, 1985).

Adopting the neoclassical economics of oligopoly, transaction cost theorists have assumed that the partners of an inter-firm alliance tend to behave opportunistically, maximizing their own benefits, while plunging the collective efforts into difficulties. The opportunistic behaviour of partners is therefore a major source of transaction costs in inter-firm alliances (Das and Teng, 1996). Opportunism results in expensive negotiating *ex ante* and monitoring costs *ex post* (Hennart, 1988). However, if partners share ownership of an entity, or are 'mutual hostages', their incentive to behave opportunistically is likely to decrease. Thus, equity alliances are used to control opportunistic behaviour, and therefore transaction costs of inter-firm alliances. The general finding in the existing literature is that when the available chances and costs of opportunistic behaviour are high, equity alliances will be the preferred format (Wandebori, 2018; Gulati, 1995). Non-equity alliances, by contrast, lack such a mechanism for curbing opportunistic behaviour, and rely heavily on the goodwill and voluntary cooperation from independent firms. However, non-equity alliances are much more flexible, with no transfer of equity, limited level of commitment and better control of risks relating to performance of the alliance.

ALLIANCE TYPE	DESCRIPTION
Hierarchical Relations	One firm takes full control of another's assets through acquisition or merger.
Joint Ventures	Two or more firms create a jointly owned legal organization.
Equity Investments	A majority or minority equity holding by one firm through a direct stock purchase of shares in another firm.
Cooperatives	A coalition of small enterprises that combine, coordinate, and manage their collective resources.
R&D Consortia	Inter-firm agreement for research and development collaboration.
Cartels	Large corporations colluding to restrain competition by cooperatively controlling production and/or prices within a specific industry.
Franchising	Use of a brand-name identity within a geographic area, with control over pricing, marketing and standardized services retained by the franchiser.
Licensing	One company grants another the right to use patented technologies or production processes in return for royalties and fees.
Action Sets	Short-lived oraganisational coalitions whose members coordinate their lobbying efforts to influence public policy making.
Market Relations	Arm's length transactions between organisations coordinated only through price mechanism.

Table 2.2 - Basic forms of interorganizational relations (adapted from Todeva and Knoke, 2005)

2.3 The Alliance Formation Process

Alliance management can be viewed as a process consisting of various stages. Das and Teng (1999) propose four essential stages of a strategic alliance – selecting partners, structuring the alliance, operating the alliance, and evaluating the alliance performance.

*2.3.1 **Selecting Alliance Partners***

The first stage in forming alliances is the selection of partner firms (Geringer, 1991). Bleeke and Ernst (1991) suggest that certain patterns of alliances tend to fail, among them alliances between competitor, between weak and strong firms and between weak firms. They suggest that alliances of strong equal are more likely to succeed. However, it is unclear if this claim can be generalised. In developing countries for example, foreign companies in alliances with local companies are usually stronger than their indigenous counterparts, yet many such alliances have been known to be successful. Others suggest that high levels of interim trust and complementarity of resources are essential conditions (Kanter, 1994). As pointed out earlier, it is the need for critical resources that sometimes motivates firms to approach their potential partners.

*2.3.2 **Structuring the Alliance***

In the second stage of alliance management, partner firms negotiate the structure of the alliance (Albers et al, 2013; Das and Teng, 1996b). As noted previously, alliances can have various structures, ranging from joint ventures to equity and non-equity alliances. Indeed, flexibility is one of the key advantages of alliances and partner firms can afford to be involved in alliances in various degrees. In a highly competitive and volatile environment, the advantage of being flexible is quite important for alliance formation and success.

*2.3.3 **Operating the Alliance***

After an alliance is structured and set up, partner firms work together to operate the alliance. Sufficient cooperation is the foundation for a successful alliance as it is necessary for partner firms to work for the realisation of collaborative advantage. Cooperation means that firms pursue common interests in the alliance, so that they restrain their self-interested activities that may harm their partners. In the absence of sufficient cooperation, firms will tend to exploit the alliance and their partners for their private interests. An alliance competence contributes to alliance success, both directly and through the acquisition and creation of resources (Lambe et al, 2002), which indicates that a successful operation implies alliance competence. An alliance competence is not only antecedent to the resources that are necessary for alliance success but also to alliance success itself (Lambe et al, 2002).

*2.3.4 **Evaluating Alliance Performance***

The evaluation of alliance performance is a controversial subject, mainly because there is no generally accepted criteria for alliance performance evaluation (Das and Teng, 1999). The most practical approach is to separately examine the extent to which the alliance has served the objectives of each partner. By the very nature of alliances as joint entities, partner firms probably cannot be as patient as they are regarding their own separate operation and performance (Chuang et al, 2015). With a short-term orientation, partner firms view alliances as transitional in nature and capable of delivering only quick and tangible results.

Consequently, alliance performance evaluation will rely heavily on financial and market-based indicators. A short-term orientation may well be valuable for an alliance, as alliances are often under pressure to deliver results in a rapid fashion and since tangible results are important to keep an alliance going. If short-term performance is ignored, the alliance may lose its focus and fail to enlist sustained support of the partners.

On the other hand, long-term orientation has its own values in alliances. When partners adopt a long-term orientation, they view the alliance as at least semi-permanent i.e., as an entity that will grow and adapt to the changing environment in the future. As a result, more patience, commitment, and investment are likely to be generated. In evaluating alliance performance, partner firms will look more at the overall state of the alliance i.e., cooperation and morale rather than only financial and market aspects of the alliance. Such a long-term orientation is particularly helpful when there is a high degree of uncertainty in the market. With this approach, partners are also better able to overcome the initial problems in an alliance. Given the importance of both short-term and long-term orientation in alliance, the two need to be integrated somehow.

As indicated, for strategic alliances to succeed, their performance must be constantly assessed and evaluated against the short and long-term goals and objectives of the alliance. In order for the feedback monitoring system to be successful, it is important that the goals of the alliance are well defined and measurable (Brouthers et al, 2017). Several measures are used for the evaluation and measurement of strategic alliance performance. Financial measures are used, which may include sales and market share, return on investment, new product creation, name recognition and shelf space (Cacciolatti et al, 2020; Yang and Meyer, 2019; Michelet and Remacle, 1992). Strategic alliances can also be more specifically measured by developing a balanced scorecard, building a dollar defense, and accounting for surplus value. Whilst strategic alliances are difficult to measure and evaluate, this can be done by understanding the form used and understanding the goals of the companies involved.

2.4 Alliance Motives

In today’s fast-paced global economy, it is increasingly true that many companies simply do not have the time and resources to establish new markets one-by-one. Therefore, forming an alliance with an existing company already in that marketplace is a very appealing alternative.

Traditionally, strategic alliances were used by multinational companies as vehicles to enter the markets of developing countries that enforced restrictive conditions on foreign investment. More recently, however, firms in developed market economies have been increasingly willing to participate in cooperative ventures, sometimes with direct competitors. The momentum for this has come from the firms themselves, which have voluntarily adopted alliances as a strategic option in response to changing market conditions rather than in compliance with exogenously enforced rules (Glaister and Buckley, 1996).

Strategic alliances are seen as an attractive mechanism for hedging risk because neither partner bears the full risk and cost of the alliance activity (Porter and Fuller, 1986). Alliances of this type often provide for the management of the operation by one of the partners, while the other merely contributes capital and absorbs some of the risk failure (Mariti and Smiley, 1983). More broadly, Contractor and Lorange (1988) and Anderson et al (2014) identified the ways in which alliances can reduce a partner's risk. These include spreading the risk of a large project across more than one firm; enabling product diversification and thus reducing market risks associated with being reliant on only one product; enabling faster market entry and quicker establishment of presence in the market, which in turn allow more rapid payback of investment; lowering of total investment cost of a particular project by combining expertise in the parent firms.

The main elements of the strategic motives identified in the literature are now discussed.

2.4.1 ***Product Rationalization and Economies of Scale***

Where production is characterised by economies of scale and learning by doing, firms may attempt to reduce costs by expanding output to achieve these benefits. External growth through horizontal merger, which is another possible way to achieve the cost reducing benefits of larger output, involves the combination of whole firms. This poses uncertainty about the efficient operation of the larger firm following post-merger integration. Any resulting difficulties of the merger could offset the cost reduction given by a larger volume of output. Strategic alliances, in contrast allow firms in the same industry to rationalise production, thus reducing costs through economies of scale and learning by doing, while avoiding the uncertainties and difficulties of full-scale merger (Mariti and Smiley, 1983).

2.4.2 Transfer of Technology and Expertise

Alliances provide strategic benefits from the exploitation of synergies, technology, or other skills transfer (Kong, 2018; Harrigan, 1988). An alliance must be more than a simple transfer of inter-firm technology. It must involve a longer-term relationship. Significant innovations are likely to result from the fusing of complementary skills, a result which is unlikely to be achieved by one firm acting alone. Not all companies can provide the technology that they need to effectively compete in their markets on their own. Therefore, they are teaming up with other companies who do have the resources to provide the technology or who can pool their resources so that together they can provide the needed technology.

2.4.3 Conformance with Host Government Policy

One of the oldest rationales for strategic alliances has been building links with local companies to accommodate host government policy (Glaister and Buckley, 1996). Technology transfer is not only viewed as being significant to the success of a strategic alliance, but host countries now demand more in the way of technology transfer. Many governments in developing countries insist that access to the local market can occur only if the foreign company works in cooperation with a local partner. Such a protectionist policy is not only confined to developing countries. Japan has had what in effect is a policy of exclusion, which has been a major contributory factor in many US and European firms using strategic alliances as the most practical way of selling their products in the Japanese market (Contractor and Lorange, 1988).

2.4.4 Facilitate International Expansion

It is necessary to distinguish between the role of alliances in establishing corporate linkages as opposed to their role in corporate entry strategies. Firms faced with foreign market entry have a wide array of entry modes to choose from. Most international business literature focus on three distinct modes of entry into a foreign market: licensing or franchising, joint venture, or setting up a wholly owned subsidiary. According to Hill et al (1990), for a given context of strategic, environmental, and transaction-specific variables, identifying the optimal entry mode is a complex and difficult task. Further complicating the issue, they contend that a firm’s choice of entry mode depends on the strategic relationship the firm envisages between operations in different countries.

Despite the fundamental problems associated with identifying the optimal entry mode, the role that alliances may play in facilitating entry into a foreign market cannot be over emphasised.

Since it is an expensive, difficult, and time-consuming business to establish a global organisation and a significant international competitive presence, strategic alliances offer considerable savings. The move to new foreign markets and the development of either a multi-domestic or global strategy can be facilitated by alliance formation even for firms with considerable overseas experience. In addition, the speed of internationalisation may be critical given the benefits that may accrue to early entrants such as the ability to command premium prices and the possibility of gaining significant market share.

2.4.5 ***Achieve or Sustain Competitive Advantage***

Alliances (or cooperation) reflect the instinct to survive, and an offensive drive for competitive advantage. Alliances are particularly alluring to small businesses because they provide the tools businesses need to be competitive (Das and Teng, 2000). For many small companies, the only way they can stay competitive and even survive in today's technologically advanced, ever-changing business world is to form an alliance with another company or companies. Medium-sized companies must recognise the mutual benefits they can derive from strategic alliances in areas such as marketing, technology, and outsourcing. Therefore, by forming alliances with other companies, small and medium-sized businesses can accomplish bigger projects more quickly and profitably than if they tried to do it on their own. According to Harbison and Pekar (1998), the world has entered a new age – an age of collaboration – and only through allying can companies have the capabilities and resources necessary to win in the changing global marketplace. Self-reliance is an option few companies will be able to afford.

2.4.6 ***Shaping the Competition and Consolidating a Firm's Market Position***

Strategic alliances can influence who a firm competes with and the basis of competition (Porter and Fuller, 1986). They could blunt the abilities of competing firms to retaliate by binding potential enemies to the firm as allies. Alliances can defend current strategic positions against forces that are too strong for one firm to withstand. Through the combined internal resources of diverse firms, alliances could create more effective competitors (Harrigan, 1988). Strategic alliances may therefore be used as an offensive strategy, for example by linking with a rival in order to put pressure on the profits and market share of a common competitor (Contractor and Lorange, 1988).

2.5 Risk and Alliances

In dealing with the challenges of a more integrated global market, many firms are finding themselves unable to cope with the traditional arsenal of competitive strategies, which emphasise maximum exploitation of an individual firm's competitive advantage. One way to survive this mounting competition, as many firms are discovering, is to cooperate with other firms, and create collaborative advantage (Bleeke and Ernst, 1991). Inter-firm alliances have therefore emerged as a response to the new competitive environment (Rangan and Yoshino, 1996).

However, managing alliances is much more complicated and difficult than managing a single firm, mainly because of the additional factor of managing the partner firm. In fact, studies have shown that the failure rate of alliances can be as high as 50% (Rangan and Yoshino, 1996). Compared with such non-alliances as acquisitions and subsidiaries, the success rate of strategic alliances is significantly lower (Bleeke and Ernst, 1991). Because there is a relatively high level of failure risk in alliances, strategic alliances must be classified as a high-risk strategy. Risk is a significant factor in strategic management since strategic decision making is inevitably concerned with assessing odds for successful performance (Baird and Thomas, 1985; March and Shapira, 1987; Das and Teng, 1998, 1999, 2000). According to Das and Teng (1998), the control of uncertainties and risks in one's environment forms the essence of management. Risk sharing or risk controlling have been proposed in other studies (Inigo et al, 2020; Christ, 2016; Anderson et al, 2014; Kogut, 1988; Porter and Fuller, 1986; Mariti and Smiley, 1983; Contractor and Lorange, 1988) as important justifications or motive for joining strategic alliances.

Traditionally, risk has been defined as either unanticipated variation or negative variation only (Miller and Leiblein, 1996). Das and Teng (1998) define risk as unanticipated negative variation, since according to them, managers generally associate risks with negative outcomes. Risk is a choice, rather than a fate and the source of risk is uncertainty (Das and Teng (1998). The risk construct dominates the literature on entrepreneurship and the ability to bear risk has been identified as the primary challenge facing entrepreneurs. The term 'risk' has a very specific meaning in the literature. Risk as a general noun is also defined as exposure to the chance of injury or loss; a hazard or dangerous chance (Webster, 1989). Various definitions of risk imply that we expose ourselves to risk by choice. As defined in most literature, risk is a probabilistic phenomenon.

It therefore follows that the outlining of a strategy (e.g., strategic alliances) can be compared to formulating a risk profile because the risk-taking strategy is an essential part of the total strategy and risk acceptance characteristics are essential to the success of many strategies. This is particularly crucial for innovative and entrepreneurial organizations, since innovation and entrepreneurship are inherently uncertain (Emblemsvag and Bras, 2000). Many researchers have identified risk-sharing as an important motive for entering inter-firm alliances (Tang et al, 2016; Marshall et al, 2014; Li et al, 2013; Stanek, 2004; Das and Teng, 1998; Alter and Hage, 1993; Kogut, 1991; Badaracco, 1991; Oliver, 1990). What then are the main risks facing alliance partners?

Firstly, it should be recognized that it is unlikely that managers are able to consider every possible risk when entering strategic alliances. Consequently, before discussing the risk types, the notion of bounded rationality is worth examining.

2.5.1 ***Bounded Rationality***

The classical approach to strategy presumes the rational objective of sustained profitability and rational means of achievement (Lawrence and l-Haq, 1998). Nevertheless, the whole notion of rational ordering of phenomena by professional academics has been called into question. Rationality is the core behavioral assumption in orthodox neoclassical economics. Principles of maximization, self-interest and consistent choice commonly underpin this view of the rational economic actor. There is a broad consensus however, that this mainstream notion of rational behaviour is an inadequate representation of both rationality and actuality. Instead, the bounded rationality notion has increasingly been embraced. Simon, a pioneer of bounded rationality, sees it as distinguishing between 'the perfect human rationality that is assumed in classical and neoclassical economic theory and the reality of human behaviour as it is observed in economic life' (Simon, 1991).

The behavioral assumption of bounded rationality embodies rejection of perfect knowledge and optimization on the part of economic actors, which characterizes the treatment of rationality in the neoclassical economics and instead involves an element of being limited or bounded. In the classic formulation of bounded rationality, Cyert and March (1963) suggest that:

- The human capacity for rational cognition is limited.
- People will not engage in an exhaustive search for relevant information.
- People will not interpret data objectively i.e., without bias.
- People will not consider all options but foreclose on the first ‘good offer’ i.e., will satisfice, not optimize.

Thus, managers first do not consider the infinite number of possibilities available to a rational actor (as espoused in economic theory) due to the inability of the human mind to grasp and process all these possibilities. Secondly, the need to take action in a relatively short timeframe is usually paramount. Hence, managers seem to use conscious and subconscious filters to reduce the enormous range of possibilities to a manageable number. Risks with regards to alliances are now discussed.

Companies entering strategic alliances face significant risks that may lead to the failure of the alliance, if not identified and managed properly. Alliances are an important strategic tool for many companies, but are inherently risky, with a large percentage of alliances failing (Christ, 2016). In unpredictable markets such as that of developing countries, the need to manage risks in alliances cannot be over emphasised.

According to Ring and Van de Ven (1994), partners are faced with two sets of risks in the alliance structuring process: those ‘regarding future states of nature’ and those regarding cooperation. This description has been modified by Das and Teng (1996), who suggest that there are two distinctive and equally important types of risk in strategic alliances: *relational risk* and *performance risk*. According to them, relational risk is concerned with cooperative relationships, or the probability that the partner does not comply with the spirit of cooperation. Opportunistic behaviour of the partners (Williamson, 1985) is a typical source of relational risk. On the other hand, performance risk refers to the probability that intended strategic goals of an alliance may not be achieved, even though cooperation between the partners is satisfactory. ‘Risk’ often refers to factors that impact on the risk experienced by the firm, either external or internal to the firm, i.e., the sources of the risk (Miller and Leiblein, 1996). To this end, relational risk and performance risk differ in terms of their sources: the first arising from firm-firm interaction, and the second from firm-environment interaction. And since these two sources represent different realms, they offer two independent types of risk. Whatever damage is caused by sub-optimal cooperation is attributable to relational risk, and whatever losses are caused by firm incompetencies and market uncertainties are ascribable to performance risk.

If strategic alliances are viewed as a strategic choice for achieving certain objectives, the difference between strategic alliances and all other strategic choices can be understood by differentiating relational risk and performance risk (Das and Teng, 1998). While performance risk is prevalent in any kind of strategic choice, relational risk is more prevalent and significant in cooperative strategies, or strategic alliances in this case. It is therefore worth exploring these two risk types in more detail.

2.5.2 ***Relational Risk***

A successful strategic alliance depends substantially on effective cooperation between the partners, since the motive for entering an alliance is to exploit the benefits of cooperation. Even though various types of alliances may differ in the extent of their reliance on inter-firm cooperation (Ring and Van de Ven, 1992), a satisfactory level of cooperation seems indispensable for any of them. Thus, it would be a serious problem if one partner does not commit itself to cooperation as fully as expected by the other partner(s). Relational risk reflects this concern of a partner about possible default by other partners, i.e., the probability that partner firms lack the commitment to the alliance and that their possible opportunistic behaviour could undermine the prospects of the alliance. The motives of such discordant behaviour can either be rational or irrational. Rational motives refer to self-interest seeking by economic actors, or opportunistic behaviour (Williamson, 1981).

Economic theory assumes that decision makers always try to maximise their utility (Williamson, 1985), and it is only reasonable to expect economic institutions to act similarly. In other words, firms are expected to pursue their self-interests, even though it might mean hurting both their partners and the joint task (Gulati, 1995). In many cases, it seems justified to do so, because the payoff from cheating could be greater than that from complying with the agreement (Parkhe, 1993). As opportunistic behaviour is present only in cooperative strategies, relational risk is directly related to strategic alliances. It is believed that all partner in inter-firm alliances, given a chance, would tend to maximise their own interests at the cost of other partners. In an effort to control the self-interest seeking behaviour, the partners are compelled to negotiate and write explicit and contingent contracts, which generally involve high costs. Shared equity ownership is also used to align the interests of the partners so that the tendency to exploit the joint entity will be curbed. In the absence of opportunism, each partner can expect to honour the spirit as well as the letter of an agreement (Williamson, 1981).

Furthermore, it can be deduced from the literature that inter-firm trust helps reduce the concern about opportunistic behaviour (Ring and Van de Ven, 1992), and thus mitigates relational risk. Trust refers to the confidence that one will find what is desired from the partner, rather than what is feared (Deutsch, 1973). Apparently, the ability to rely on trust leads one to believe in the goodwill of the partner. Thus, the degree of inter-firm trust would be negatively related to the perception of relational risk (Das and Teng, 1998).

2.5.3 ***Performance Risk***

Ring and Van de Ven (1992) have summarised various terms used to describe risks involved in a strategic choice. These include commercial and technological risks, corporate risk, and corporate strategic risk. Despite the variety of terms, the essence of risk inherent in strategies is that the achievement of strategic objectives does not necessarily depend on the efforts of a firm. Thus, the term 'performance risk' is used to account for the possibility and consequences that the objectives of inter-firm alliances are not successfully achieved, although the partners cooperate fully (Das and Teng, 1996). In other words, performance risk embraces all kind of hazards, except those related to cooperation that can either lead to the failure of an inter-firm alliance, or to an increase in the magnitude of loss from the alliance. Factors extraneous to cooperation, such as incompetence of partners or other environmental/ economic factors (e.g., changes in government policy and economic recession), market factors (e.g., fierce competition, demand fluctuation) are the sources of performance risk. This can be related to what has been described as administrative and environmental risk previously in this paper. However, unlike relational risk, performance risk is part of every strategic decision because performance can always fall below one's expectations. When the risk of an otherwise attractive strategy is too high for a single firm, inter-firm alliances appear to be a natural alternative. Although performance risk is not concerned with cooperation, forging strategic alliances often mitigates the degree of performance risk faced by an individual firm.

One important source of performance risk in inter-firm alliances appear to be the non-recoverable investments made in a particular alliance (Parkhe, 1993). Non-recoverable investments include physical, human, and other assets that are dedicated to the specific alliance. When a firm has to invest specifically for a strategic objective, performance risk goes up because the potential loss from failing the course becomes higher. March and Shapira (1987) found that decision makers use potential gains and losses to estimate risk. Consequently, a high non-recoverable investment will lead to the perception of high performance risk. The point is that performance risk can be shared by forming an alliance, while relational risk is created only in alliances. Again, the distinction between performance risk and relational risk characterises strategic alliances. Thus, the two types of risks, taken together, constitute a dimension for understanding the alliance making process. Given the perception held by companies in developed countries about firms in developing countries, and since performance risk is not peculiar to strategic alliances alone, it is expected that foreign companies will have a higher perception of relational risk where alliances with firms in developing countries are concerned.

2.5.4 ***Non-Alliance Risk***

A different type of risk, that of non-alliance is worth considering. An entrepreneurial firm may decide not to cooperate with any large firm. However, while this may be an option for some entrepreneurial firms, penetrating and competing in a market with established incumbents and multinationals often requires organisational capabilities, resources, finance, and technology that most entrepreneurial firms simply do not possess. Moreover, it can be very costly and time consuming for organisations to try to develop these organisational capabilities on their own. It is therefore important to emphasise that 'risk is not just bad things happening, but also good things not happening' (Miller and Leiblein, 1996) – a clarification that is particularly important when considering alliances in certain contexts. The relentless challenges of globalisation will not go away. Properly managed strategic alliances are among the best mechanism that companies have found to bring strategy to bear on these challenges. In today's uncertain world, it is best not to go alone.

2.5.5 ***Risk in the Alliance Formation Process***

Alliance management can be viewed as a process consisting of various stages. This section highlights the role of relational and performance risks in the overall process of alliance formation and management.

Risk in Selecting Alliance Partners

From a risk perspective, partner selection boils down to the risk of finding a fit between partner firms. According to Das and Teng (1999), partner firms have resource fit and strategic fit. Resource fit refers to the degree to which partners possess compatible resources i.e., resources that can effectively integrate into a value-creating strategy, while strategic fit is the degree to which partners have compatible goals in the alliance. These two types of fits need to be achieved simultaneously in an alliance Das and Teng, 1999).

Resource Fit: This is important for alliance partners because resources and capabilities of alliance partners are ultimately responsible for alliance performance. Resource fit means that partners' resources are somewhat related; they either complement or supplement each other's resources. Complementary fit is needed when different resources of partner firms can be effectively combined to pursue a market opportunity. A supplementary fit is created when similar resources are brought into the alliance by both partners to achieve a competitive advantage, such as to achieve economies of scale.

Strategic Fit: In finding resource fit, partners often risk ignoring the question of compatibility of strategic objectives, or strategic fit. Strategic fit in the alliance means that the firms know each other's real objectives in the alliance, and that these objectives can be accommodated in the alliance without harming the alliance or the partner firms. Many firms falsely assume that partner firms share objectives in an alliance, whereas firms sometimes harbor hidden agendas, for example as a cover for an eventual acquisition (Bleeke and Ernst, 1991). Even if hidden agendas are not present, an alliance may serve vastly different purposes for the individual partners. One firm may seek market penetration and another possibly reputation or knowledge transfer. Whilst it is recognised that knowing each other's real objectives in an alliance could be a daunting task, not knowing at all is a risk which often leaves a firm in a vulnerable position.

Risk in Structuring the Alliance

Compared with single organisations, strategic alliances denote a more flexible arrangement and partner firms can afford to be involved in alliances in various degrees. However, the risk in maintaining a high level of flexibility is that flexibility is not always an advantage (Kanter, 1994) and structural rigidity – the opposite of flexibility – is often necessary as well (Das and Teng, 1999). Structural rigidity involves a high degree of connectedness and tightness, whereby members in an ongoing relationship are linked with each other in some tangible way.

Strategic alliances have often been seen as being too loosely coupled, so they lack a strong authority structure and significant commitment. Structural rigidity helps consolidate the relationship and helps partners to focus on the success of the alliance. Given the inherent conflict between flexibility and rigidity, firms should not be single-minded in their pursuit of flexibility and a balance must be achieved between the two desirable but opposing conditions (Das and Teng, 1999).

Risk in Operating the Alliance

In the absence of sufficient cooperation, firms will tend to exploit the alliance and their partners for their private interests. Therefore, adequate cooperation is key to an alliance as it enables firms to pursue similar interests while refraining from self-interested activities that may harm the alliance or its partners. On the other hand, competition in an alliance must not be ignored (Hamel, Doz and Prahalad, 1989) and a certain level of competition in an alliance is essential since private interests are inevitable. The difference between competition and opportunistic behaviour, however, is that competition is open and legitimate and takes such forms as learning from partners, protecting own tacit knowledge and preventing an alliance from being a direct competitor in one's core business. And since strategic alliances are a combination of market transactions and internal operations, competition will have an important role in alliances (Das and Teng, 1999). Opportunistic behaviour, on the other hand is self-interested with guile. Thus, the risk of operating in an alliance is that partners often over-emphasise either cooperation or competition. Without adequate cooperation, alliances cannot be operated smoothly. Without sufficient attention to competition, alliances will unwittingly lose their competitive advantage and equitable rights and rewards. Therefore, both competition and cooperation must be preserved in an alliance as dynamic and permanent conditions (Das and Teng, 1999b).

2.6 Alliance Risk Management

The question "what does it take for strategic alliances to succeed?" is central to the strategic alliance debate. Where there is variety in risk, there is equal variety in methods of assessing and managing risk. According to Smallman (1996), there are three factors that effectively define an organisation's approach to managing risk in general. These are those relating to:

- *Structure:* the nature of the organization risk infrastructure.
- *Strategy:* the nature and combination of techniques used in risk management.

- *Culture:* the beliefs and values that influence the actions of individuals and groups who are responsible (directly and indirectly) for risk management within the organisation.

The difficult task of managing risks in strategic alliances can be carried out only if managers first understand the complex nature of these risks. As pointed out previously, it is unlikely that managers are able to consider every option available when entering into strategic alliances. A selected range of factors that should be considered when companies enter into strategic alliances are now examined.

2.6.1 ***Partner Selection***

A successful alliance requires the joining of two competent firms, seeking a similar goal and both intent on its success. A strategic alliance must be structured so that it is the intent of both parties that it will actually succeed. The foundation for strategic alliance is laid during the internal formation process (Lorange et al, 1992). This internal formation process includes partner selection and the initial agreement between parties. Selecting an appropriate partner and itemising rules of the alliance are the most intensive process in the formation of an alliance (Shah and Swaminathan, 2008; Al-Khalifa and Peterson, 1999; Hitt et al, 2000). Yet done correctly, they help ensure a higher quality, longer lasting relationship. Therefore, to ensure the best chance of success, companies should either seek partners who do have similar management philosophies or draft an alliance agreement that adequately addresses the differences and provides for their resolution.

2.6.2 ***Senior Management Commitment***

The commitment of the senior management of all companies involved in a strategic alliance is a key factor in the alliance's ultimate success. Indeed, for strategic alliances to be truly strategic, they must have a significant impact on the companies' overall strategic plans and must therefore be formulated, implemented, managed and monitored with the full commitment of senior management (Elmuti and Kathawala, 2001). Without senior management's commitment, alliances will not receive the resources they need. In other words, if senior management is not committed to alliances, adequate managerial resources, in addition to capital, marketing and labour resources may not be assigned for alliances to accomplish their objectives. Senior management's commitment is important not only to ensure the alliances receive the necessary resources, but also to convince others throughout the organisation of the importance of the alliance (Lorange et al, 1992).

2.6.3 *Thorough Planning*

Planning, commitment, and agreement are essential to the success of any relationship. The overall strategy for the alliance must be mutually developed and key managing individuals and areas of focus for the alliance must be identified. According to Elmuti and Kathawala (2001), the first step is to gain a clear understanding of the vision and values of each company. The next step is to gain agreement on the market conditions in the region of the world that the alliance will be operating in. This is followed by clearly stating the issues, strengths, and concerns of each organisation. These initial steps allow the participants to bridge preliminary gaps of understanding at the onset of the process. The next step is then to identify areas of common grounds and here is where commonality in the strategic direction among the partners can be identified. Next, the partners need to define internal and external value of the alliance and agree on the strategic opportunities to mutually pursue. The final step is to create a tactical plan to address the strategic targets. Although thorough planning is one of the key ingredients to the successful formation of strategic alliances, Ferdows (1980) found that entrepreneurs who had set up successful alliances had not followed any written plan. He attributed the lack of such plans to uncertain environment and mutual dependence of the activities.

2.6.4 *Cleary Defined, Shared Goals and Objectives*

In forming a strategic alliance, the question must be asked: "how integrated will the alliance be with the parent organisations?" Some alliances are highly integrated with one or more of the parent organisations and share such resources as management staff and support function like payroll, purchasing and research and development. Conversely, others may be independent from their parent organisations. Whatever the relationship between the two partners, the merging of separate corporate cultures in which the parent firms may have different, even ultimately conflicting strategic intents can be difficult. It is therefore extremely important that alliances are aligned with company strategy.

2.6.5 *Clearly Understood Roles*

In forming strategic alliances, the partners must have clearly understood roles. It is crucial that the question of control is resolved before the alliance is formed. A strategic alliance by definition falls short of a merger or a full partnership. For this reason, control is not dependent on majority ownership. The degree to which each partner is in control of operations and can offer influential input for decision making must be determined before the alliance is formed (Alvarez and Barney, 2001). If the partners in an alliance decide up front exactly what each partner's role is in the newly formed business, then there is no misunderstanding or uncertainty as to how decisions will be made. In this way, the relationship between the partners will be a much more amicable one. To this end, a great deal of care needs to go into developing a contract for an alliance. Large firms often have long due diligence checklists to evaluate potential alliances. Smaller firms need to invest in their own due diligence and craft alliance agreements that protect them from future accusations and/or exploitation by large-firm partners (Hubbard et al, 1994).

2.6.6 ***Building Trust***

As alliance complexity rises and experienced human resources are pulled ever thinner, the challenges become more acute. In his article, "Strategic alliances: when you don't want to go it alone," Gimba (1996) states that managers of strategic alliances "must create and maintain an environment of trust." This however requires the surrender of at least some managerial control. However, good partnerships, like good marriages, do not work based on ownership or control.

Prior research has shown that some entrepreneurial firms believe an open and trusting relationship with a large alliance partner will mitigate the larger firm's propensity to under invest in the relationship (Das and Teng, 1999). Much has also been written recommending trust as an important component of an alliance relationship (Qiu and Haugland, 2019; Jiang et al, 2016, 2013; Gulati, 1995a; Barney and Hansen, 1994). In the UK for example, the presence of trusting attitude was noted as one of the most important alliance success factors in the oil industry (Haque et al 2004), with other significant factors including shared and aligned goals, commitment, and supportive and open behaviour. Haque et al (2004) also suggest that the absence of trusting attitudes, absence of clear targets, presence of adversarial behaviour and absence of fair allocation of risk and reward are viewed as the main factors which often cause failures of alliances and partnering in the UK oil & gas industry.

2.6.7 ***Communication Between Partners and Frequent Performance Feedback***

As with any relationship, communication is an essential attribute for the alliance to be successful. Without effective communication between partners, the alliance will inevitably dissolve as a result of doubt and mistrust which accompany any relationship which does not manifest good communication practices. Furthermore, for strategic alliances to succeed, their performance must be constantly assessed and evaluated against the short and long-term goals and objectives for the alliance. For the feedback monitoring system to be successful, it is important that the goals of the alliance be well defined and measurable.

2.7 Summary

The two theories examined in this chapter (the resource-based view and the knowledge-based view) address opportunism and see the reduction of such as pivotal to alliance success. The knowledge-based view focuses on knowledge as the primary resource, while the resource-based view has a broad definition of resources, including social resources and strategic aspects, as well as the mention of more varied incentives for alliance formations. This may suggest that the resource-based view for instance, can explain a wider range of alliance formations. This perspective addresses the need of alliance management and social status, as well as the implications of varying capabilities within alliances, depicting a more extensive image of the inner workings of alliances. The resource-based view can also be used to explain knowledge, as it is a recognized type of resource within its framework. Both the resource-based view and the knowledge-based view refer to how alliances allow access to complementary resources or knowledge, allowing firms to eliminate their own deficiencies by helping each other, suggesting that both theories acknowledge specific gains from dissimilarities among partners. Both theories also address how alliance termination has negative consequences for firms, either through significant costs related to the process of termination, or the loss of investment and accessed knowledge and resources.

In conclusion, this chapter has reviewed both similarities and differences in theoretical perspectives, as well as correlations to how the perspectives focus on different incentives and aspects of alliances in general. However, most alliance studies appear based within a functional context, very different from the environment or setting in which this research was conducted. Many do not seem to have considered some crucial factors relevant to the environment in context, such as regulatory powers or Corporate Political Activity. The review has shown that where such factors play a key role, some of what the literature is saying may not be entirely applicable. Finally, literature on alliances as a tool for local capacity development in the Nigerian oil and gas industry is almost non-existent. This has in turn provided the basis for the research into alliances within the specific context of the Nigerian oil and gas industry, with the aim of providing further insights into how local capacity can be developed through strategic alliances in the industry.

3.0 SOLUTION DESIGN AND RESEARCH METHODS

To address the business problem identified (i.e., the quest to create the right alliances that will ultimately lead to consistent local capacity development), a thorough review of literature was conducted as outlined in the previous chapter. I adopted a systematic review of existing literature and this approach aided in to locating, selecting, and appraising as much as possible of the research relevant to the particular review question (Denyer and Tranfield, 2018). I designed the study based on my research question (how can strategic alliances be used to develop local capacity in the Nigerian oil & gas industry?).

I considered a qualitative, multiple case research method most suitable and adopted same for this research. A multiple case approach facilitates analysis of data within each situation and across different situations (Gustafsson, 2017). Multiple case studies also allow comparisons and inferences to be drawn from the studies.

The research setting is the upstream service sector of the Nigerian oil & gas industry. This setting was selected following an initial review of other sectors within the Nigerian oil & gas industry value chain in terms of where local capacity development should be focused. Other sectors of the industry and potential settings included exploration and production, geology, engineering, refining, LNG, petrochemicals, retail, distribution, and logistics. However, I chose the upstream service sector for three primary reasons:

1. The focal company (the author's own organisation) operates in this sector, provides the right setting to evaluate proposed solutions and stood to benefit directly from the study.
2. The upstream service sector is the primary focus of the regulator for capacity development.
3. There are many local firms operating in this sector and not necessarily growing capacity, thus providing an appropriate setting for the study in terms of potential impact.

I commenced with my research question: "How can strategic alliances be used to develop to local capacity development in the Nigerian oil & gas industry?' In selecting the participant companies, I considered accessibility, whether local or foreign, how active they were in the industry, reputation, experience in strategic alliances and commitment to local capacity development. I then designed and structured my interview questions accordingly.

I developed different versions of the interview guide, each with three broad sections, tailored to the three groups of participants: the focal company, the target companies, and the regulator. The interview guides were similar in structure, with questions varied to address specific issues where relevant (see Appendices I to III).

3.1 The Focal Company

The focal company (FC) is an indigenous oil services company incorporated in 2002, operating in the upstream sector of the Nigerian oil and gas industry, and supporting exploration and production activities within the industry. The company was founded by three individuals who spent many years working in Europe and wanted to create an organization that will be the benchmark and reference point for local content development in the Nigerian oil & gas industry. Selecting the focal company (the author's organization) was useful as a means of conducting a deeper examination of the subject within an environment where a range of portfolio alliances (equity and non-equity) existed (pre- and post-regulation) as a market entry tool, to grow capacity and to stay ahead of the competition. The focal company was also chosen to enable proposed solutions to be evaluated and aid the practical examination of the implications of various alliance factors uncovered in the literature. Selecting the focal company allowed the assessment and evaluation of the impact of specific alliance approaches on capacity building in the Nigerian oil industry. Finally, seamless access to data was a key consideration in selecting the focal company.

For the focal company, I asked about the company's overall corporate strategy and core services. I asked about the organisation's experience of alliance formation, types of alliances entered, reasons for entering alliances, and how such alliances were operated and evaluated. I then asked participants to describe the challenges and risks associated with their alliances, how they mitigated and what they see as the bottlenecks to successful alliance formation and capacity development within the industry. I asked participants to explain their understanding of the Nigerian Oil and Gas Industry Content Development (NOGICD) Act, the nature of alliances before the regulation, impact of regulation on alliances and local capacity, and whether their alliances have aided local capacity development for their organization. Finally, I asked how they assess the role of the regulator in monitoring and enforcing the regulation, what obstacles they see in the quest to build local capacity within the industry and what proposed solutions they have either implemented or will suggest. I utilized a range of open-ended and close-ended questions which facilitated the collection of relevant information.

3.2 The Target Companies

My research sample for this stage included three local firms (TC1, TC2 and TC3), and two international firms (TC4 and TC5).

TC1 is a local oil service company incorporated before the Nigerian Oil and Gas Industry Content Development (NOGICD) Act was signed into law and provides a range of services to the industry including offshore asset maintenance, training, and survival emergency response. The company has a portfolio of alliances cutting across loose arrangements and a joint venture (equity) with a foreign firm, with the latter being post-regulation.

TC2 is a local oil service firm, providing drilling, cementing, tubulars, automation, and controls services. I selected TC2 because it is one of the very rare companies to have emerged from the merger of two local firms. The company embarked on an acquisition growth strategy, targeting smaller local firms in the areas in which it wanted to expand. TC2 has a range of other alliances that complement its joint venture.

TC3 is a local company that provides Engineering, Procurement and Construction (EPC) services to the industry. TC3 emerged from a joint venture between a foreign oil service company, a local company acquired by the foreign firm and an independent local company in a similar space. I chose TC3 to get the perspective of a local company that emerged solely via equity alliance, from both an acquisition and a joint venture, but post-regulation.

TC4 is a foreign oil service company that provides well flow management services and has been operating in Nigeria for well over 20 years (again pre-regulation). I selected TC4 because the company is wholly foreign-owned, had no equity partnership in Nigeria and had entered a myriad of loose alliances with many local companies, solely for the execution of specific projects. However, post regulation, TC4 has continued with the same approach of utilising local companies as *"local content vehicles",* solely to comply with the regulation. This was particularly useful to gain further insight into how loose alliances alone have worked (or otherwise) post-regulation.

Finally, TC 5 is also a foreign company providing subsea equipment to the offshore/deep water sector of the Nigerian oil industry. TC5 was selected because the company has been operating in Nigeria for several decades pre-regulation and like TC4, had no equity alliance with any local company pre or post regulation. The company operates via sales or commission agents and other project-specific alliances. TC5 also works with different local companies as *local content vehicles* for regulatory compliance purposes.

COMPANY	**PROFILE**
FC	▪ Indigenous oil service company ▪ In existence pre-regulation ▪ Author's organization ▪ Equity and non-equity alliances ▪ Visible capacity development in some services
TC1	▪ Indigenous oil service company ▪ Offshore asset maintenance, training, and survival emergency response ▪ Portfolio of alliances ▪ Equity and non-equity alliances ▪ In existence pre-regulation ▪ Visible capacity development
TC2	▪ Indigenous oil service company in existence pre-regulation ▪ Drilling, cementing, tubulars, automation and controls ▪ Emerged from a merger of two local companies ▪ Acquisition of smaller local companies a growth strategy ▪ A portfolio of loose alliances ▪ Visible capacity development
TC3	▪ A joint venture between a foreign company, a local company acquired by the foreign company and another local firm ▪ Equity alliance ▪ Emerged post-regulation ▪ Engineering, procurement and construction
TC4	▪ A foreign oil service company ▪ Well flow management services ▪ Operating pre-regulation ▪ No equity alliances with local companies ▪ A portfolio of local content vehicles (LCVs) for regulatory compliance
TC5	▪ A foreign oil service company ▪ Subsea equipment to offshore/deep water ▪ Operating pre-regulation ▪ No equity alliances with local companies ▪ Project-based, loose alliances with local companies for regulatory compliance

Table 3.1 - Study Participant Profile

While all 5 companies selected are service companies, the selection was diverse as each company provides different services within the oil and gas upstream service value chain. For the target companies (TC1, TC2, TC3, TC4 and TC5), I interviewed founders, executives, and senior managers. Table 3.1 provides a summary of the profile of the participant organisations in the study.

3.3 Data Source and Collection

The primary source of the qualitative data used in this study was semi-structured, one-on-one interviews. In the initial stages of my work, I conducted fourteen in-depth interviews with 10 participants from the focal company. Each interviewed lasted between 45 and 60 minutes. These interviews covered structure and age of the company, the competitive landscape, experience in alliances and partnerships, types of alliances formed, reasons for entering alliances, and the formation, operation, and evaluation of such alliances. The interviews also covered local capacity development, as well as the role of regulation in fostering alliances and capacity building. Interviews were standardized across informants with some customization to allow for some peculiarities in hierarchy and business units.

I selected different levels of participants within the focal firm, including executives, senior management, members of the board of directors and non-management staff. The board members were selected to provide insight into direction and corporate governance issues. The executives were chosen to provide information on the firm's background, strategy, competitiveness, local capacity initiatives and alliance formation, operation, and management. The senior managers selected were those responsible for business development, management of alliance partners, sales, operations, technical service delivery and finance. Finally, the non-management staff selected were those dealing directly with alliance partners (also known as technical partners) and who were instrumental in the day-to-day interfaces. I conducted these interviews over a 4-month period, together with several follow-up interviews following my analysis of data collected.

In the next stage, I conducted 3- 5 interviews with each of five target companies over a 6-month period. Each interview lasted between 60 and 90 minutes. The purpose of these interviews was to extend the research outside the focal firm in order to have a basis for comparison and arrive at more generalisable conclusions. The interviews covered the target firm's structure, services, and alliance portfolio, and explored the understanding of the NOGICD Act, implementation, monitoring and assessment of their local capacity development strategies via alliances. I interviewed executives within the regulator. This was important to juxtapose findings from target and focal firms with the regulator's perspective, specifically in terms of local capacity gaps, compliance, monitoring and support for alliances aimed at building capacity.

I conducted further interviews based on the information obtained from prior informants. In total, I conducted 36 interviews with 27 different informants. All interviews were audio-recorded (with the permission of the participants) and subsequently transcribed verbatim. A cross-section of the interview participants is presented in Table 3.2.

COMPANY	TITLE OF PARTICIPANTS	NUMBER OF INTERVIEWS	LENGTH OF INTERVIEW
Focal Company	▪ Chairman, Board of Directors	1	50 minutes
	▪ Deputy Managing Director	2	60 minutes
	▪ Chief Operating Officer	1	60 minutes
	▪ Chief Financial Officer	1	50 minutes
	▪ General Manager	1	45 minutes
	▪ Assistant General Manager	1	45 minutes
	▪ Operations Manager	1	55 minutes
	▪ Senior Technical Manager	1	50 minutes
	▪ Human Resources Manager	1	45 minutes
	▪ Senior Procurement Services Advisor	2	50 minutes
	▪ Business Development Executive	2	45 minutes
TC1	▪ Founder and Chairman	2	60 minutes
	▪ Managing Director	1	75 minutes
TC2	▪ Managing director	2	60 minutes
	▪ Director, Government Relations	2	60 minutes

	▪ Director, Business Development	1	90 minutes
TC3	▪ Managing Director	1	80 minutes
	▪ Director, Nigerian Content	1	65 minutes
	▪ Director, Operations	1	60 minutes
TC4	▪ Country Manager	2	60 minutes
	▪ Business Development Manager	1	75 minutes
	▪ Local Content Manager	1	70 minutes
TC5	▪ Country Manager	1	75 minutes
	▪ Operations Manager	1	60 minutes
	▪ Local Content Manager	1	80 minutes
Regulator	▪ Director of Monitoring	2	60 minutes
	▪ Member, Governing Board	2	75 minutes

Table 3.2 - Cross-section of interview participants

For secondary data, I used publications on the history of the Nigerian oil and gas industry, archival and recent data on regulatory development (The Nigerian Oil and Gas Industry Content Development Act (2010) and the Petroleum Industry Bill (2021). Furthermore, I used several publications and papers from Nigerian National Petroleum Corporation and The Ministry of Petroleum Resources on the developments in fiscal policies and structuring of the industry between 1977 and 2010. Additional papers and presentations by the dominant international oil companies operating in Nigeria on capacity development initiatives between 2010 and 2020 enabled me to assess efforts since regulation was introduced in the industry. To gain further insights into the regulatory issues, I used published market outlook and reports on the implications of the regulations by consultancies such as KPMG and PwC.

I utilised proceedings at several industry conferences over the period 2010 to 2020 which provided additional rich sources of secondary data. These include proceedings from the Nigerian Oil and gas Conference and Exhibition (2010 to 2020), Practical Nigerian Content

Conference (2015 to 2020), Society of Petroleum Engineers (2015 to 2020), Nigerian Content Consultative Forum (2015 to 2019), and the Offshore Technology Conference (2014 to 2019).

Data Source	Details
Industry reports, publications and articles.	Nigerian Oil and Gas Industry Content Act (2010); Petroleum Industry Bill (2021); Reports on the Petroleum Industry Bill by KPMG (2021)and pwc (2021); Joint report on capacity development initiatives by 5 international oil companies (2013); Department of Petroleum Resources Annual Reports (2010 to 2020); Nigerian National Petroleum Corporation Annual Reports (2009 to 2020); Upstream (2018 to 2021); OPEC bulletins and reports (2015 to 2021); reports and archives on the history of the Nigerian oil and gas industry.
Company records, industry directories	Brochures, annual reports, OPEC monthly and annual reports (2004 to 2020);
Websites and publicly available information on the regulator, government parastatals and international oil companies and other online platforms	Nigerian Content Development and Monitoring Board (https://ncdmb.gov.ng/); Department of Petroleum Resources (https://www.dpr.gov.ng/); Nigerian National Petroleum Corporation (https://nnpcgroup.com/); Society of Petroleum Engineers (http://spenigeria.spe.org/home); NOG, Investopedia (https://www.investopedia.com/); Shell Nigeria (https://www.shell.com.ng/about-us/what-we-do/spdc.html); Total Energies Nigeria https://totalenergies.com/nigeria); Chevron Nigeria (https://www.chevron.com/worldwide/nigeria); ExxonMobil Nigeria (https://corporate.exxonmobil.com/Locations/Nigeria);Nigeria LNG (https://www.nigerialng.com/Pages/index.aspx); Organisation of the Petroleum Exporting Countries - OPEC (https://www.opec.org/opec_web/en/); World Petroleum Council (https://www.world-petroleum.org/); Nigeria Oil & Gas Conference (https://www.nogevent.com/); Upstream (https://www.upstreamonline.com/)
Industry conference proceedings	Nigerian Oil and Gas Conference (2010 to 2020); Practical Nigerian Content Conference (2015 to 2020); Society of Petroleum Engineers (2013 to 2020); Nigerian Content Consultative Forum (2015 to 2019); Offshore Technology Conference (2014 to 2019); World Petroleum Congress 2016 to 2019);

Table 3.3 – A summary of secondary data sources

Finally, I reviewed and used targeted websites for company annual reports, history, trends and industry developments. Some of these include online portals like Investopedia and websites for the international oil companies operating in Nigeria, Organisation of the Petroleum Exporting Countries (OPEC), World Petroleum Council, the Nigerian National Petroleum Corporation (NNPC) and the industry regulators - the Nigerian Content Development and Monitoring Board (NCDMB) and the Department of Petroleum Resources (DPR). A summary of the secondary data sources is presented in Table 3.3.

The integrity of data such as informant details, interview transcripts etc. was preserved by ensuring that data was collected, stored, and analysed via Atlas.ti, a computer-aided qualitative data analysis software (CAQDAS).

3.4 Data Analysis and Solutions Design

For the data analysis, I employed an iterative process, involving concurrently collecting data and analyzing the data.

To begin the analysis, I developed specific write-ups on all five participant companies, which included a range of quotations from the interview participants. I used both the recorded interviews and transcripts to develop the write-ups. The resulting write-ups were about 20 pages long for each participant company. Next, I began comparing the data, looking for similarities or differences in alliance formation, motives, local capacity development and the role of the regulator in creating a conducive environment for alliance formation. I then identified initial concepts in the data and grouped them into categories (open coding). I looked for relationships between these categories in order to assemble them into higher-order themes. I then identified and grouped the themes to determine emergent patterns, marking different sections as being relevant to one or more of my emerging themes. I refined my findings a few times by reviewing data and conducting follow-up interviews where necessary. Snapshots of the emerging themes from the data analysis are presented in appendices I to V.

Finally, I revisited the theoretical perspectives, compared my findings with extant literature to identify similarities and variances and to establish generalisability of my findings.

The solutions design was informed by the two main theories described in the preceding chapter i.e., the Resource-based View and the Knowledge-Based View. This is largely because the intended solution had to be in line with the need for the right types of alliances in the Nigerian Oil and Gas industry, driven by the right motive (resource acquisition, knowledge sharing and knowledge acquisition) to achieve local capacity development. It is expected that the solutions will bring about necessary changes in the adoption and implementation of existing local content regulations, lead to more equity alliances and ultimately facilitate an increase in the rate of local capacity development in the industry.

Implementation and evaluation of the solutions within the focal company was directly achieved by benchmarking the solutions against company strategy and future practices. For the target companies, evaluation was achieved via follow-up interviews to discuss the solutions. Actual, practical implementation will be evaluated over time (post-study), with changes expected to be impactful within five years. However, with the regulator, the implementation was expected to take a different and even more challenging path. Firstly, the resistance to change will need to be overcome via continued ‘selling’ of the benefits of the solutions. Engagement at the most senior level will be crucial to a successful adoption of the proposed solutions. This was achieved via continued discussions with the regulator throughout the research and also follow-up sessions to share the solutions before the completion of the study. Secondly, circulation of a white paper as a fall out of this research has helped to reinforce the benefits of the solutions, test the proposed solutions to some extent and encourage a much-required buy-in. Finally, the proposed solutions have formed the basis of a more active participation by the author at local content workshops and conferences for an industry-wide acceptance. The findings from this research are presented in the next chapter.

4.0 FINDINGS

The role of alliances in the Nigerian oil & gas industry in building local capacity cannot be overemphasized. This is critical especially between foreign and local firms because the technical expertise, knowledge and technology reside largely with foreign firms. Alliances are also important to foreign firms operating in (or wanting to operate in Nigeria) not only because foreign companies need the local knowledge of the local firms to navigate a challenging environment, but also because foreign firms are now required to demonstrate commitment to local capacity if they are to operate in the industry. Alliances are therefore the key to knowledge transfer, technology transfer and local capacity development within the Nigerian oil & gas industry.

The data analysis resulted in several findings covering the predominant types of alliances in the Nigerian oil industry, as well as provide insights into alliance motives within the industry. The findings revealed the major challenges to alliance formation and local capacity development pre- and post-regulation. Collectively, these findings suggest on one hand that longer-term strategic alliances via equity partnerships are critical to local capacity development. On the other hand, they suggest that to achieve the required types of alliances, more effort will be required, not only in terms of the implementation, monitoring and enforcement of current regulations, but also in terms of changes to the way in which local firms are structured and operated. I have divided my findings into three parts: (1) pre-regulation; (2) purpose/impact of regulation; (3) obstacles and challenges.

4.1 Pre-Regulation

Prior to talks of any regulatory changes in the Nigerian oil industry, the only visible, mandatory alliances were those between the Nigerian government via the state-owned company, the Nigerian National Petroleum Corporation (NNPC), and the various international oil companies. Such alliances were required because the Nigerian state required the technology, technical expertise, and financial muscle of the international oil companies in order to explore its petroleum resources. The international oil companies on the other hand required the cooperation of the Nigerian government to access the petroleum resources that can provide them with huge growth and financial returns. Alliances between local and foreign companies were limited to loose arrangements, with no concerted effort by the government to encourage local capacity building. I have grouped the challenges with alliances pre-regulation as follows:

- Loose alliances with rare equity partnerships.
- Inadequate funding.
- Lack of transparency.
- Lengthy tendering cycle and shorter contract tenure.
- Lack of guidance on equity joint ventures.
- Security concerns and bad country reputation.
- Limited human capacity.
- Lack of trust.
- Inability of most local companies to attract foreign partners for equity alliances.

For the focal company (FC), partnering with Original Equipment Manufacturers (OEMs) was a deliberate strategy as a start-up in order to gain early credibility and acceptance in the industry. As one of the executives stated, *"regulation played no part in driving our approach to alliances at the initial stages".* I found that loose arrangements were prominent in form of instruments like a Memorandum of Understanding/Agreement (MOU/MOA) and representation or agency agreements. Each partnership was targeted to specific products and services, and conflicts of interest were strictly avoided. The selection process involved identifying OEMs with footprints in the market and on the clients' approved manufacturers list, prior to approaching them with clear propositions on value to be added. Scouting is very common for Nigerian companies looking for foreign partners and this takes several forms from speculative approaches to attendance at conferences, exhibitions, and other key industry events.

> *"A key difference in our approach was physical visits and presentations unlike many local companies who simply approached potential foreign partners with emails and telephone calls alone",*

a director stated. FC also entered a range of project-specific alliances purely for the bidding and execution of particular projects. According to another executive, *"the loose arrangements were easier to form, required no long-term commitment, are cheaper and less risky due to limited financial commitment"*. I found that the rate of capacity development was slow pre-regulation, with the loose alliances adopted by the company.

Other local firms have also pursued loose alliances to varying degrees. Target company 1 (TC1), a local oil service firm also incorporated before the local content Act was signed into law is another example of a local company that pursued only loose alliances with foreign companies pre-regulation. According to the founder, *"it was the only way to access the market as a new entrant"*. Under the loose partnerships, the company provided its services largely via the deployment of expatriates provided by their foreign partners. However, I found a different approach in target company 2 (TC2) which is one of the rare companies that emerged from a joint venture between two local firms pre-regulation. Following the joint venture, TC2 proceeded with forming more loose alliances with foreign companies to strengthen its portfolio and technical capabilities. Except for equity alliances between the Nigerian government via the Nigerian National Petroleum Corporation (NNPC) and the International Oil Companies (IOCs), equity alliances were hard to come by before regulatory changes and hence the uniqueness of TC2.

Findings indicate that prior to changes in regulation, there was very little incentive for both local and foreign firms to go into long-term equity partnerships, with many local firms preferring to opt for a principal-agent relationship and happy to receive commissions.
International expansion was the primary motive for foreign companies who ventured into the Nigerian market. However, the lack of regulations meant there was little or no incentive for any long-term commitments and foreign companies were still able to operate in the country without necessarily having any serious commitment to capacity building via alliances with local companies. Good examples are target companies 4 and 5 (TC4 and TC5).

TC4 is a foreign oil service company that has been operating in Nigeria for well over 20 years. The company had no strong tie with local firms and operated on its own as a foreign entity. Although the company employed local labour, these were largely lower-level positions. There was no Nigerian in management or decision-making positions. As one senior executive stated, *"we had 20% local workforce with the rest being expatriates; there was really no push to do more"*. There was also no concerted effort to train beyond the requirements of the job and/or project.

TC 5 is also a foreign company that has been operating in Nigeria for many years. Like TC4, the company operated with minimal local staff and no investment in-country. Local companies were used as sales or commission agents on a project-by-project basis. The company participated is some loose partnerships. A senior manager stated: *"we did participate in some consortiums, although not so many, but I will not call those real alliances".* The loose partnerships were designed to enable the company subcontract/outsource the less complex aspects of some projects to its local 'partners' and to navigate the local terrain. It was generally recognized that local knowledge was resident with local companies and a key attraction to foreign firms who have expanded into the region. TC5 operated with licensing agreements but remained a wholly owned subsidiary of a foreign company.

Lastly, security concerns were prevalent with instance of kidnapping and abduction of oil company personnel, as well as disruption to operations. I found that focal and target companies had security concerns at the top of their list of operational risks. What then drove the formation of alliances in the Nigerian oil industry pre-regulation? I found that the motives vary depending on whether a local or foreign firm, or whether a foreign firm was already operating in Nigeria or planning to do so.

4.1.1 Motives for Alliance Formation Pre-Regulation

Before the regulatory changes, I found that market entry, creating competitive advantage and exploitation were key motives for local companies. This is because local companies lacked the technical expertise and technology required by the industry in general. Local companies became representatives and 'agents' of foreign companies largely to sell their products into the industry. Where technical services were involved, local personnel were hired only for lower end roles while the foreign companies sent in expatriates who managed the projects, with teams disbanded at the end of the project. The focal company (FC) and target companies (TC1, TC2, TC3, TC4 and TC5) are good examples.

As a new entrant into the market, FC needed the right product/service mix to gain credibility with its clients. Securing partnerships via representation of Original Equipment Manufacturers (OEMs) was seen as the only way to break into an already competitive and somewhat saturated market. A senior executive said:

> *"in the early days, our partnerships were principally product-based, meaning we went for foreign manufacturers of specific oilfield equipment with a view pushing their products in our territory. Access to the market was our main driver."*

Over the years, the company used its alliances to gain competitive advantage by developing some levels of in-house expertise. FC carved out a niche for itself, created a pool of trained engineers (certified by OEMs) and even achieved a 'trainer' status allowing the company to conduct training and certify its own engineers on behalf of the OEM. Nevertheless, the extent of capacity development was limited.

In TC1, a purely service company, the motive for their alliances was access to required knowledge. According to a director: *"most Nigerians lacked the required skills set. So, our partners provided the avenue for our staff to learn".* The company sent all new recruits to its partners abroad for training and hands-on experience. TC2 emerged as a joint venture between two local firms. I found the primary motive for the alliance to be pooling together strengths to create competitive advantage for the company. TC4 and TC5 however differ. As foreign companies operating in Nigeria, their alliances before regulatory changes were largely driven by the need for local knowledge in order to expand into the territory.

I also found other motives where alliances were formed purely to exploit the market and make quick financial gains. Such alliances were borne out of nothing beyond having a deep personal relationship, and "payback". This refers to alliances formed for the sole purpose of repaying some sort of favour or commitment or solely to gain financial benefits in a short period of time. The implication of the alliance models pre-regulation is that there was lack of real growth in local capacity development largely due to loose partnerships not geared towards longer-term development. To put things in some context, it is worth highlighting the purpose, nature and impact of the local content regulation on alliance formation and capacity building in the industry.

4.2 **Purpose of Regulation**

At the heart of the Nigerian content policy is the need to compel oil and gas multinationals to utilize the indigenous material and human resources with the aim of building local capacity, increasing local participation, dissuade capital flight, increase contribution of oil and gas to Gross Domestic Product (GDP) and facilitate backward and forward linkages. The Nigerian content development was defined by the Nigerian National Petroleum Corporation (NNPC) as

> *"the quantum of composite value added in the Nigerian economy through the utilization of human capacity and material resources for the provision of goods and services to the petroleum industry, within acceptable quality, health, safety and environmental standards in order to stimulate the development of indigenous capabilities."*

However, it is generally observed by industrial watchers that the Nigerian government was unable to meet its stated local content targets before 2010. Following the inability of the Nigerian Content Division of Nigerian National Petroleum Corporation (NNPC) to ensure compliance or to implement and enforce Nigeria content policy in oil and gas industry, the Nigerian Oil and Gas Industry Content Development (NOGICD) Act (The Act) was signed into law on April 22, 2010. The Act established the Nigerian Content Development and Monitoring Board (NCDMB), vested with the responsibility to implement the provisions of the Act, make procedural guidelines and monitor compliance by operators within the oil industry. The Act mandates the NCDMB to directly develop capacity for local supply and to develop procedures and put in place enablers that will stimulate and assure the utilization of locally made goods by the industry. The Board was given the responsibility to implement the Act's provisions and regulations; supervise, coordinate, administer, monitor and manage the development of Nigerian content; assist local contractors and Nigerian companies to develop their capabilities and capacities; make procedures to guide the implementation and ensure compliance with the provisions of the Act; ensure compliance; and monitor and coordinate Nigerian content performance of all operators in accordance with the provisions of the Act.

The Nigerian content policy provides that contracts to be awarded by oil and gas multinationals operating in Nigerian to oil servicing firms must be executed in-country in a fabrication yard located in Nigeria by a Nigerian firm with high percentage of Nigerian workers or in joint venture partnership with a foreign firm; and procurement of materials and services needed to execute the contracts should as well be sourced from local manufacturers. The Act led to the creation of the Nigerian Oil and Gas Industry Content Joint Qualification System (NOGIC JQS), an electronic platform through which major tenders are published and processed. There are two distinct types of NOGIC JQS database: the Standard and Essential Services Suppliers. The Standard Suppliers participate in all major and specialized tender exercises above the approval threshold of the Operators. The Essential Services Suppliers (ESS) also known as Community Suppliers participate in tender exercises within the Operator's threshold and restricted to Operator's immediate community. This category of suppliers is not required to pay the registration and renewal fees. The stated mission of the regulator with regards to the NOGIC JQS is: *"To provide an industry platform for fast, efficient and transparent supply chain transactions",* and the stated objectives are as follows:

- Establish a Joint Qualification System for the Pre-qualification of Contractors/ Suppliers for ease of Supplier selection.
- Reduce contracting cycle time from duration of about 18 – 24 months to half or shorter timeframe.
- Entrench transparency into the contracting and procurement process thereby ensuring the integrity of the process.
- Increase visibility of contract opportunities to indigenous Contractors / Suppliers for capacity building.

The Act goes on to say that the NOGIC JQS *"shall constitute an industry databank of available capabilities and shall be used as the sole system for Nigerian Content registration and pre-qualification of contractors in the industry",* leading to:

- Verification of contractors' capacities and capabilities.
- Evaluation of application of Nigerian content in the operations of oil companies and contractors.
- Database for national skills development pool.
- Ranking and categorization of oil service companies based on capabilities and Nigerian Content.

In addition, the Act led to the creation of the Equipment Component Manufacturing Initiative (ECMI) to address capacity gap in the supply of equipment to the industry from local manufacturers. A key component of the ECMI is the introduction of the mandatory certification requiring all vendors supplying equipment to the oil and gas industry to obtain a Nigerian Content Equipment Certificate (NCEC). The NCEC has become a Nigerian content requirement for the participation in tenders involving the supply or deployment of equipment for oil and gas services, and companies are granted certificates depending on their level of capacity within a given service area. The NCEC is issued to companies who assemble, manufacture, calibrate or own equipment in Nigeria and it is issued in categories A to D, with category A being the highest (issued only where facilities have been commissioned for specific product or service delivery), and Category D being the lowest. A snapshot of various NCEC categories is presented in Table 4.1.

Company Categorization	**Description**	**Tender implementation**
Category A	Nigerian companies currently in the business of manufacturing/ assembling/ coating/ threading of equipment/ components of equipment. Certificate is valid for 2 years from the date of issuance	Given first and exclusive consideration in all tenders related to equipment for which NCEC was obtained. If no service provider with category A submits bids or supply capacity of all participating category A companies have been exhausted, Category B companies shall be given consideration.
Category B	Companies that are OEM representatives with no in-country manufacturing /assembling facilities but propose to assemble/ manufacture /fabricate components and parts etc.	Vendors are given next consideration if no vendor with Category A submits bids or supply capacity or all participating Category A companies have been exhausted.
Category C	Companies that deploy equipment for operations such as dredging, survey, drilling, construction etc. Certificate is valid for one (1) year. Equipment is expected to satisfy the requirement of at least 50 % ownership by Nigerians.	In a situation where category C&D certified companies are into a tender then Category C vendors shall be given first consideration.
Category D	Companies that deploy equipment for operations such a dredging, survey, drilling, construction, catering etc. certificate is valid for one (1) year	Category D vendors are to be considered only when the capacities of Category C vendors have been exhausted or where there are no Category C certified companies in the bid exercise.

Table 4.1 - Nigerian Content Equipment Certification (NCEC) Categorisation

Finally, the Act went on to establish the Nigerian Content Intervention (NCI) Fund, managed by the Bank of Industry (BOI). The NCI Fund is a pool of funds made available by the Nigeria Content Development and Monitoring Board (NCDMB) to meet the funding needs of indigenous manufacturers, service providers and other key players in the Nigerian Oil and gas Industry. It is sourced from the Nigerian Content Development Fund (NCDF) which is derived from the levying of 1% Nigerian Content taxation on all contracts in the oil & gas industry. The NCI was designed to achieve the following strategic objectives:

- Increase indigenous participation in the oil and gas industry and build local capacity and competencies.
- Promote the growth and development of Nigerian Content in activities connected with sectors of the Nigerian oil and gas Industry.
- Deepen the creation of linkages to other sectors of the national economy and boost industry contributions to the growth of Nigeria's National Gross Domestic Product.
- Address persistent funding challenges that have hindered capacity and growth of local service providers in oil and gas.
- Facilitate the growth of community-based companies in the upstream oil and gas sector.
- Spur productivity and job creation in the Oil and Gas industry.
- Attract investment capital into the sector and boost contribution of the sector to Nigeria's economic growth.

The Act was therefore poised to address many of the problems identified with local capacity development pre-regulation in the preceding section, but without due consideration to the need for a conducive environment for the right alliance structures.

4.3 Impact of Regulation on Alliances and Local Capacity Development

From my findings, the introduction of the Nigerian Oil and Gas Industry Content Development Act has certainly brought about some notable changes in the industry that has fuelled more meaningful alliances in the industry. There have been notable improvements in the areas of human capital development, fabrication and manufacturing capabilities, and service provisioning. The regulation has facilitated an increase in the emergence and growth of local companies, with more investments seen in the industry than ever before. The regulation has also brought about changes in the way foreign companies operate, as well as the number of Nigerians in senior management positions within foreign companies operating in the industry. The Nigerian Content Development and Monitoring Board (NCDMB) introduced a range of guidelines expected to be adopted by alliance partners in the industry.

Foreign companies are now mandated to work with local companies to be considered for major projects. Local companies are required to show in-country capabilities and infrastructure to be given preferences. Equity alliances between local and foreign firms are required to have a higher Nigerian ownership for the venture to benefit from concessions reserved for local companies. The introduction of the regulation has forced many companies to rethink their alliance strategy and fostered additional investments in the sector. For instance, FC proceeded with an equity joint venture alliance, aimed at building local capacity via knowledge and technology transfer via significant investment in technology. The project set in motion local assembly and production of components that FC previously imported on behalf of its clients. Although the company still operates under a range of other alliances within its deep portfolio, the equity alliance is the propellant in creating major competitive advantage for FC. The company's good structure, credible management, detailed business plans and sincerity earned early trust with partners and helped in securing many of the alliances the company operates till date, and most notably with its equity joint venture.

For certain aspects of the value chain, I found that enforcement is attracting more serious attention, with clauses introduced into major tenders and bids to ensure only companies who have visible capacity are eligible to bid for such contracts in the first instance. A senior manager at FC puts it this way:

> *"in the past, anyone can bid for services like OCTG or Line Pipe services. However today, without evidence of local capacity to do threading and machining in-country, a bidder cannot scale the Nigerian content requirements, without which they cannot progress on the tender".*

TC1 also added an equity alliance to its portfolio of alliances after the regulations. The company set up a joint venture with one of its partners to build a major training facility in the country, the first of its kind. The company has trained between 1,000 and 2,000 operators since its investment and has moved from an all-expatriate model to utilizing only local personnel. For TC2, additional investments have been made post-regulation via acquisitions of smaller local companies and the company now possesses the much coveted "A" category of the Nigerian Content Equipment Certification across most of its services, creating a huge competitive advantage for itself. The company also now runs a training academy with one of its foreign partners in the country.

A good example of foreign companies rethinking the way they operate in the country, while adhering to the regulation mandating foreign companies to work with local ones, is TC3. As stated earlier, the company emerged as a joint venture between a local service company, a foreign service company operating independently in Nigeria pre-regulation, and a local firm acquired by the foreign company. The aim was to ensure that local personnel understudied and learned from their foreign counterparts over time. According to a senior manager, *"we have put in a succession plan so that the expatriates spend a year or two on the job and Nigerians can take over"*.

Nevertheless, I found that some foreign companies have only adopted more loose partnerships with local companies in the face of changes in regulation. TC4 and TC5 are good examples. In TC4, alliances are only formed with local players that can help in bidding for jobs while the company stays in the background. In some cases, the alliances are formed because the local partner can help in securing the contract. According to the CEO,

> *"we utilize local partners who can get us jobs and at the end of the day, he gets his percentage and moves on, which I really do not think is the essence of being in an alliance".* He further elaborated that *"in a nutshell, we have never really been fully involved in forming real alliances with local players and quite a number of them have brought a good number of jobs to the table which we have executed".*

Notwithstanding, the company recognizes that this is limiting, unsustainable and eroding its competitive edge in the industry. *"Nowadays, you have an edge to launch yourself into the market more when you are a local company",* the CEO concluded. The company has however focused instead on the human capacity element by putting Nigerians in more senior positions (a Nigerian is now CEO for the first time) and by introducing an understudy scheme between locals and expatriates. From a 1:5 (local to expatriate ratio) pre-regulation, the company now executes its jobs utilizing about 90% local personnel. This company recognizes that at some point, the structure must change if it is to continue in the industry. As another senior manager puts it,

> *"without a real local alliance, you have tactically edged yourself out of the market".* He concluded by saying *"we would have preferred to stay as we are, but the Act is twisting our arms in terms of looking more closely at local alliances".*

With TC5, I found that, like TC4, their response to the changes in regulation has not been in the area of equity alliances, although this is also recognized as a limiting factor. TC5 has responded with more investments in fabrication capability in-country and promotion of Nigerians to senior positions (the country manager is a Nigerian for the first time). The company has adopted a strategy to work with independent local companies on specific projects with a view to helping them build capacity through the project experience. The company has therefore continued with alliances that are tied to specific projects and has continued to work via carefully selected consortiums. The country manager sums it up with his comments:

> *"we do not have any joint venture and we do not have any equity alliance in the country, even now; neither do we plan to in the foreseeable future".*

In summary, I found a notable difference between the approach adopted by local companies in response to regulatory changes somewhat different from the route taken by foreign firms already operating in Nigeria pre-regulation. Whilst many more local companies have emerged in the industry post-regulation, and while many loose alliances remain, the regulation seem not to have propelled the industry at the expected pace towards longer-term alliances that can aid local capacity development.

4.4 Motives for Alliance Formation Post-Regulation

The predominant implication of my findings is the recognition that short-term or loose alliances cannot deliver the desired objective of building local capacity. To understand why longer-term alliances are now critical, it is important to reiterate the drive for local capacity building via regulations. My findings show a gradual paradigm shift in the motives for alliance formation, post-regulation. These are summarized as:

- Capacity building via knowledge (human capacity) and technology transfer.
- Creation of competitive advantage.
- Conformance with government regulations.

For the FC, I found local capacity building, growth, and conformance with regulations to be the reasons for an equity alliance following changes to regulations. The equity alliance allows a more integrated approach that provides more access to technology and joint funding of a major investment which the company could otherwise not have achieved on its own. The pooling of FC's local strengths, track record and client network with the foreign partners technical expertise, technology and finance made for a good synergy. In addition, given that the regulation gives priority to companies with in-country facilities to the exclusion of others on tenders, only companies that can demonstrate local capacity will succeed in the long-term. FC therefore responded to position itself for future growth. According to the CFO:

> *"with new regulations, getting into partnerships to provide what we could not achieve on our own was critical if we are to achieve our objective to grow in size and balance sheet".*

I found similar reasons with TC1 and TC2. TC1 moved from having only loose alliances to an equity alliance to develop local capacity. The company went on to build the largest training facility for offshore training in the country. TC2 proceeded on an aggressive growth strategy via acquisition of a number of local companies providing services in areas where the company wanted to expand into and develop further capacity. TC3 on the other hand emerged out of the need to comply with new regulations and in so doing, an equity joint venture was formed between a foreign company and two local companies. In the case of TC4 and TC5 who were both previously comfortable operating in the country without any notable alliance, both companies established Local Content Vehicles (LCV) via non-equity arrangements. However, I found that both companies recognize this to be unsustainable and may subsequently transition to an equity alliance if they are to compete effectively in the market. An executive at TC4 sums it up: *"at the end of the day, we will have to move into a joint venture where a local company owns at least 51% of the equity".*

My findings show that foreign companies are not necessarily driven to form alliances with local firms by knowledge transfer or capacity development in the first place, but the need to be compliant with new regulations. I conclude from my findings that the introduction of regulations has indeed helped in creating a path for the right motive for long-term alliance and capacity development. If this is the case, what then are the obstacles preventing the types of alliances required for local capacity development in the Nigerian oil industry post-regulatory changes?

4.5 **Obstacles to Equity Alliance Formation Post-Regulation**

Despite the introduction of local content policy since 2006 and enactment of the Nigerian Oil and Gas Industry Content Development (NOGICD) Act in 2010, and the progress made thus far, Nigerians still do not have a significant share of the oil and gas business. The growth in the industry over the years is still not visibly matched by a commensurate increase in the level of *'real'* alliances expected to increase the participation of locally sourced contractors, suppliers, skilled technicians, and entrepreneurs in the industry.

While I found consistency in the understanding of the purpose of the Nigerian Oil & Gas Industry Content Development Content Act - to grow indigenous capacity in terms of knowledge transfer to Nigerians, job creation, talent development, empowerment of locals, domiciliation of spend in-country and ultimately, nation building – I also found a number of factors (some the same as pre-regulation) preventing the right alliances that can lead to capacity building being formed. I have divided these into:

- Non-compliance.
- Poor enforcement.
- Equity structure.
- Insecurity.
- Bureaucracy & sustainability.
- Distrust.
- Inadequate funding.

4.5.1 ***Non-Compliance***

My findings show that violation of the regulations designed to foster partnerships and local capacity building in the first place is standing in the way of alliances that can help achieve the desired objective. The character of the Nigerian state as a rent-seeking class with a rentier mentality may have led to collusion between the foreign oil servicing firms and local companies acting as fronts for their foreign counterparts to cash in on the institutional incapacity of the regulatory agencies to subvert the NOGICD Act in order to win contracts in return for a proportion of the proceeds. I found a myriad of questionable alliances designed solely to give the impression of compliance, while in reality they are loose arrangements with no real or serious plans for capacity building. I define questionable alliances as those in which the local company acts as the 'middleman' used solely for the purpose of appearing to be compliant with regulations, and where resulting contracts are subsequently outsourced or sub-contracted by the local firm, to be executed by their foreign counterpart.

Furthermore, some foreign companies do not believe that having an equity alliance is what should determine their commitment to local content or local capacity development. TC4 is a good example. The company does not have any equity alliance but has invested in equipment, training of locals and transfer of knowledge to its Nigerian employees. Whilst this continues to allow them to operate in the country (provided they work with a local company as lead contractor), and while regulation mandates a succession programme, it does not lead to long-term capacity development locally, since all the technology and equipment are owned by the company. Should TC4 opt to leave Nigeria at any time, little or nothing will be left behind. Some of the 'local partners' are questionable in terms of their commitment to any long-term alliance. The country manager said:

> *"some are just portfolio companies. I have a friend out there that can influence a job. He needs a technical partner. We execute the job, he gets his percentage, and he is off, which I really do not think is the essence of being in an alliance."*

Another good example is TC5, with no equity alliance but continues to operate via project-specific partnerships. The company has also invested heavily in fabrication and training facilities in the country. However, like TC4, all the investments were made by the company and all the assets owned by the company. The country manager stated that:

> *"There are levels of capital projects but to be honest, those are tied back to specific projects that are pretty much funded to a large extent by the project, so that is the way we kind of work. We do not have any joint venture or equity alliance in the country".*

I found that proprietary information is a major bottleneck where loose alliances are formed. Both TC4 and TC5 show that they are reluctant to divulge proprietary information to local partners working with them purely on specific projects. According to the country manager at TC5,

> *"we have pulled back from a project where we were being asked to work with a local machine shop by providing drawings etc. It is simply not going to happen. It is trade secret, right?".* He went on to say that *"the project scope was scaled down and the machine shop eventually closed down"*.

Findings from FC, TC1, TC2 and TC3 show that some oil and gas multinationals are 'comfortable' with arrangements where the indigenous firms collude with their foreign counterparts to subvert the local content policy via questionable alliances, so long as projects can be executed, and production sustained. In addition, given that the regulation requires that only projects and contracts in excess of $1million would require the prior approval of the regulator prior to bidding, I found that some operators do fragment contracts to circumvent the regulation. A senior manager at TC3 explained that: *"as Nigerians, if you are not made to do something and you are not monitored closely, we will find a way around it"*.

I found some cases of imposition of contractors by the regulator, which could mean award of contracts to unqualified companies (at the expense of qualified ones), who end up outsourcing most or all scope of work. As the founder of TC1 put it,

> *"we have seen cases where an unknown company with no known track record ended up beating us to be awarded a contract. And when we probed further, we realized they were 'forced' on the client by the regulator. We knew this because the company that won eventually approached us to help in executing since they had no capacity to do so*".

Finally, I found inconsistencies in two areas:

(i) the pre-qualification of companies on the Nigerian Oil and Gas Industry Content Joint Qualification System (NOGIC JQS) on the Nigerian Petroleum Exchange (NipeX), the industry portal through which major tenders are published and processed. Currently the number of companies pre-qualified for various services is questionable. I found that there are several companies pre-qualified in service categories for which they have little or no expertise or capacity. This implies that the database is awash with companies that should not even be there in the first place. The number of pre-qualified companies has a knock-on effect on the time it takes to process a single tender from issuance of bid documents to the award of contract. This contradicts the stated mission of the regulator *"To provide an industry platform for fast, efficient and transparent supply chain transactions."* The purpose of the NOGIC JQS portal, which was to pre-qualify companies in specific service category ahead of tender publication is therefore not being fully met.

(ii) the issuance of Nigerian Content Equipment certificates (NCEC) by the regulator where companies with no purported capacity hold certificates for specified services. According to an executive at TC3, *'when you look at the number of companies that are 'qualified' for certain services, it is clear that the process for issuing NCEC* *needs an overhaul".* This creates an illusion of capability and competence and perpetuates non-compliance. A senior manager at TC2 confirmed:

> *"we do have a number of NCECs; but I must admit that we also have in what I call speculative areas, which are areas we do not necessarily have capacity in but would not like to miss out on any tenders in that space in any event. When the tender comes out, we will figure out the rest".*

I conclude that as long as there is no full compliance with the regulation, and as long as there is room for the circumvention of the regulation, the types of alliances required to build local capacity will remain few and far between.

4.5.2 ***Poor Enforcement***

Although there is consensus that the regulator has made significant progress, I found the enforcement of local content regulations to be inconsistent. I found one set of rules for some, and another set for others. Poor enforcement, sometimes at the expense of qualified companies, has led to many of the compliance issues identified in the preceding section.

FC, TC1, TC2 and TC3 are all local companies who are fully compliant with the regulations in some of their respective services. Yet securing contracts is still not automatic on the back of their equity alliances and investments. What is expected to clear the path to the commercial stages of tenders or provide advantage over non-compliant competitors does not always turn out that way. These companies are still at the mercy of the regulator, which could be discouraging for existing alliance partners and by extension, future ones. In addition, the existing certification process that is aimed at issuing certificates based on different grades of capacity development is not always enforced as indicated in the preceding section.

Furthermore, expatriate quotas are to be granted by the regulator prior to any company bringing in expatriates for given roles, and after showing that such a role cannot be filled by Nigerians. Again, this is not always enforced. Where expatriates are brought in, a system of succession planning is supposed to be in place and which the regulator is supposed to monitor closely. I found cases where expatriates have been used in the same role for many years, with expatriate quotas renewed each time. Whilst both TC4 and TC5 for instance have invested in training of Nigerians, the number of expatriates is still significant, which the companies attribute to the limited human capacity available in the country. As one executive puts it, *"there simply isn't enough expertise in-country to choose from"*. While this may be so, I found a 'struggle' between enforcing the succession plan and delaying projects where such succession has not been implemented, and this has led to the regulator giving a string of concessions or 'looking the other way'. If foreign companies can get away with non-compliance due to relaxed enforcement, then the motivation to tie up longer-term alliances with local companies will remain minimal. Without enforcement, there can be no compliance.

*4.5.3 **Mandatory Equity Structure***

It is usually up to alliance partners to decide the most suitable structure for their venture and determine who should have controlling stake. This is also usually determined by the weight of contribution as agreed by both parties. However, the local content regulation stipulates a higher equity position for local firms to qualify as a 'local company' (regardless of contribution to the venture). Unless the local company can demonstrate real contributions to justify a controlling stake, many foreign companies are uncomfortable with yielding such control to the local firm. Yet without having the 'local company' status, the expected advantages to be created by the alliance will be lost.

My findings indicate that local companies are generally unable to get into long-term, equity alliances in which they own majority due to their inability to make commensurate financial contributions. I found that this has also led to questionable alliances where the local company holds majority stake on paper to preserve the local status of the alliance, while in reality, a different, discrete, and real contract exists between parties. FC spent over eight years structuring finance to enable the company to enter an equity alliance with a higher percentage. According to the CFO: "*we spent the best part of eight years raising capital that will enable us put our money where our mouth was. Without this, how do you convince a partner that you should take a higher stake in the alliance?"* Both TC1 and TC2 emphasised the time it takes to raise the capital required for equity joint ventures, with many local firms failing in that regard, which may explain why there are very few equity alliances. A TC2 director explained:

> *"it should not be mandatory for a Nigerian company to own the majority in equity alliances before it can be credible. Let's start from somewhere and then build up, say have an agreement that allows the Nigerian company to buy more stake in the joint venture over time."*

Nevertheless, this issue was absent in TC2, since both companies in the equity alliance are local companies. This mandatory structure is presenting its own challenges. The country manager of TC5 explained:

> *"even where we had considered a possible equity alliance with a local company, they have been unable to come up with the required funds. What we will not do is what we know some foreign companies do, which is to enter into an equity agreement showing majority ownership by the Nigerian company on paper, while a separate, real agreement shows the true picture".*

The 'all or nothing' approach to some enforcement of local regulations, where no consideration is given to organic nature of the growth and development of local capacity is discouraging to many local and foreign companies who may otherwise have considered long-term partnership and investment.

4.5.4 ***Insecurity***

The threat to people working in oil and gas operations especially in the Niger delta (the main oil producing region in Nigeria) remains high. In recent years, gangs have kidnapped employees and contractors of oil producing companies. Some of the factors that have perpetuated instability in the region include poverty, historical neglect, unfulfilled aspirations for political recognition and influence and criminality.

For existing alliances, I found that the cost of executing projects or running daily operations is significantly higher when security considerations are factored in. Such considerations involve protecting physical assets as well as personnel from risks such as kidnapping and infiltration by local communities. Regulation has been unable to address this, partly because no part of the regulation is focused specifically on security, and partly because the scope of solutions to the security concerns in the industry goes beyond industry regulation. Most oil companies resort to a combination of self-help and Joint Task Force – comprising the Army, Navy and Police, deployed by the government to provide security in the Niger Delta and waterways. These security constraints remain a major hindrance to the development of new alliances and attracting investments in the country.

4.5.5 Bureaucracy and Sustainability

My findings show that the shortsightedness of policy makers means contract terms are too short and do not encourage long-term planning and investment. FC for instance has invested heavily in building capacity in-country but finds that contract terms are mostly too short, potentially putting their alliance at risk. A board member with FC said:

> *"you need long-term contracts, and guaranteed work so that investment made to support partnerships can be recovered over a period. A situation where two years following investment the project pipeline dries up is bad for partnerships, bad for the company and discourages future investments and alliances."*

Others who have made significant investments share this concern. Some industry players feel the regulator is sometimes disconnected with prevailing industry realities when setting targets and may not be listening to foreign firms operating in the industry. This was echoed by TC4 CEO: *"I feel they (regulator) are a little bit out of touch and not casting their net wide enough to listen to foreign companies on best ways to tie up with local companies."*

Although TC5 does not have any equity alliance in the country, they have made significant investments in local fabrication infrastructure. I found that concerns over sustainability have affected the zeal to move forward with any more permanent partnership structure such as an equity alliance. As the country manager stated:

> *"there is a general tendency to see the multinationals as the problem as opposed to seeing them as those needed to achieve a desired goal; they (regulator) need to listen more to the multinationals because we are not the enemy, we are not the problem".* He went on to say: "*why spend millions of dollars to build capacity that will not sustain itself? There is no investment from the government. Our last major project was in 2013 which we concluded in 2017. Now we have had our facility built and lying fallow for three years now because we are out of work. You know you cannot amortise millions of dollars of investment over one project or your price will go through the roof. So, the job is done, we got paid for that but the facility still has monthly operating expenditure, project or no project."*

I also found that the bureaucracy has led to project delays, cancellations, and lengthy tendering periods; all factors resulting in fewer projects to execute. These have combined to erode confidence in foreign companies wishing to invest in the industry via partnerships with local firms. TC1 has been involved in several tenders over the years. The CEO said:

> *"the average tendering time is 2 years, yet upon award the tenure is short. Now tell me how anyone looking to enter the industry via long-term alliances can be encouraged".*

My findings also revealed frequent changes to decision makers within the regulator affects projects and discourages long-term partnerships. Lack of re-investment by the government in the sector is affecting capacity building. Many foreign companies will only enter long-term alliances where a market has shown that it can sustain the level of capacity it is clamoring for. This was echoed by the country manager at TC4:

> *"how much of this do I want to cocoon and say okay, you know, I have a dream; in two years we will be back on the upswing. But I have been saying that for the last 5 years. We have seen politics where a project gets cancelled in the middle of a tender because there have been changes at the top; yet you have spent a lot of money getting to that stage only to be asked to begin again. At what point do you say just forget about this. As an international company, each territory competes for funding from a central pot so I must be able to demonstrate sustainability. While battling all that, it is extremely difficult to think about long-term partnerships that may tie you down into an unsustainable environment."*

4.5.6 ***Distrust***

Firstly, Nigeria is seen as a typical VUCA (Volatile, Uncertain, Complex, Ambiguous) environment by most foreign firms. It is considered an environment where the likelihood of non-performance of a joint venture is high, even with the best of intentions. This is compounded by insecurity in the country, which puts alliances in jeopardy and leads to some foreign companies exiting or terminating existing partnerships. The risk of non-performance, either due to economic forces or security constraints, is therefore a major obstacle when potential foreign firms evaluate the viability of a long-term alliance with a local company. Many of the issues highlighted in the preceding section on bureaucracy and sustainability have led to distrust.

Secondly, many local companies fall below the required ethical standards, lack professional management, and end up not standing up to the scrutiny of intensive due diligence. This is compounded by the huge number of local "portfolio companies", making it difficult for foreign companies to truly differentiate between credible local companies and 'unserious' ones and the potential for wrong partner selection, rather high. I define "portfolio companies" as those non-start-up companies without the very basic minimum attributes such as verifiable offices, corporate profile, or personnel (many are one-man companies).

Thirdly, I found overwhelming consensus among local companies that too many local graduates lack critical-thinking skills and the ability to communicate effectively, solve problems creatively, work collaboratively and adapt to changing priorities. This is in compounded by the lack of technical skills. As one executive puts it, *"Unemployment is up, but we still find it difficult to find the workers we need!".* The limited human capacity in the country means almost starting from scratch when forming alliances in order to build local capacity. This can be discouraging and unattractive to potential foreign partners who expect a minimum standard to be met in most cases.

Fourthly, default and breach of agreement especially by the local partner, as well as selfish interests and opportunistic behaviours also constitute major bottlenecks to successful alliance formation within the industry. Many local companies do not respect the terms of agreements, and many go on to work with competitors where such are seen to provide short-term benefits over their allies. Many foreign companies are skeptical when it comes to partnering with local companies. As such, a 'trial' period is virtually imposed during which trust is established. I found that local companies that end up in equity alliances tend to do so with foreign companies they have been working with for many years. In many cases, the initial loose alliance is what translated into a joint venture. I found mutual distrust amongst local companies which may explain why strong alliances between local companies are rare, with local companies disinterested in forming any partnerships beyond those designed for specific projects and short-term gains. Target company 2 (TC2) is an exception as highlighted earlier.

The focal company (FC) and target companies 1 and 3 (TC1 and TC3) are good examples. FC has been in partnership via a renewable Memorandum of Agreement (MOA) with its new JV partner for several years. A strong relationship was in place, credibility established and viable fit evident prior to the emergence of an equity joint venture. Partnerships with local companies are not common with FC and where such happens, they are for specific projects and to bridge specific gaps. I found one case of breach by a foreign partner with FC, which led to the termination of the existing partnership. A senior manager in FC explained that: *"we basically terminated what could have been a long-term partnership with the foreign firm due to unethical behaviour that are uncommon with firms of their calibre."* From my findings, this was the only single case of breach emanating from a foreign company out of the portfolio of alliances within both the focal and target companies interviewed, confirming the earlier observation that such is mostly resident with local firms.

In TCI, the equity alliance was a result of working with the partner for several years, establishing viability of the business and again showing credibility. As the founder stated, *"you do not show up one day and say hey, let's have a joint venture. Trust must be established and that is something that is not easy to come by in our society."* The company does not trust fellow local companies given previous experience. The founder concluded that:

> *"many Nigerian businesses are run like a one-man show. All our foreign partners are still with us but we have had to pull out of virtually all arrangements with local companies. I am sure you know there are exceptions to the rule and there are some very credible Nigerian companies, but my first reaction now is to avoid local companies unless we have no choice."*

TC3 had been working in Nigeria for many years and had worked with both the local company it eventually acquired, as well as the local company it went into equity alliance with, prior to talks of establishing a long-term, binding alliance. Nevertheless, prior alliances raised issues of trust, reliability, and commitment of the local company to any long-term partnership and development. The head of local content development said:

> *"I can share an example with you where we just picked out a local company and put in a lot of money for the initial set up. We thought we were developing a company that could grow and build into something, but immediately after that project, they made good profit and you know the Nigerian life. They got the new cars, new houses and never reinvested the money into the company. We only found out when the next project came along, and we visited only to find nothing while they had the audacity to ask us for support all over again. The company effectively breached every letter of our agreement."*

The foreign companies operating in Nigeria also see things in a similar vein, but with additional concerns. I found that they do not trust local companies largely because of past experience, which in turn impacts the zeal for new alliances. For example, the Chairman of FC who worked for many years as a CEO in some of the major international oil companies explained:

> *"the tendency of many Nigerian businesses that go into alliances with foreign companies to quickly lose focus and get involved in all sorts of distractions means that international companies are very skeptical going into alliances with local companies."*

Many local companies are also not properly structured, not audited by known audit firms, have unverifiable financial records, are owned by one person, have no clear succession plan, cannot show evidence of making statutory remittances, have questionable ethical standards and therefore cannot meet up with due diligence requirements. As such, many are generally unattractive to foreign companies for alliances that go beyond the basic. Both TC4 and TC5 spend a lot of time on due diligence even for the loose alliances they enter. I found compliance to be a major fall out from most due diligence exercise on local companies. The TC4 CEO concluded that:

> "*at the end of the day, even with our loose alliances, many of the companies do not respect the agreement and we have found cases of our so-called partners also working with a competitor."*

I found that the foreign companies tend to stick with the same local company even for loose alliances given the tedious process that led to such an alliance in the first place and given the dearth of credible local companies with the right structure and corporate governance.

Finally, I found that the bad country reputation and bad publicity cause skepticism and distrust, put local companies at a disadvantage when seeking alliances, especially long-term. This makes it difficult to find partners willing to enter longer-term relationships. As one executive puts it:

> *"the insecurity issues in the country are well documented, both real and exaggerated. But the bottom line is that before any company considers entering a long-term commitment in our environment, it takes much more than a show of the dollars."*

The lack of trust in the operating environment, lack of trust in the credibility of many local firms, and the lack of ample local human capacity summarise the overall distrust affecting more serious alliances in the industry.

*4.5.7 **Inadequate Funding***

Funding is a critical element of capacity development. The high cost of doing business in Nigeria means only a handful of local companies can manage to raise the kind of capital required for major growth. Local banks are unwilling to provide funding for any venture based on the strength of the business case alone. I found that where such funds are obtainable via local banks, the interest rates (typically between 22% and 24% per annum) make even the most attractive venture very risky and unattractive to potential foreign partners. I also found that the alternative is to seek international funding or other capital-raising approaches such as private equity investments. Unfortunately, the reputational issues with most local companies, and the lack of proper corporate structures and management earlier highlighted mean accessing international funds is unattainable for most Nigerian firms.

FC is a good example of a company that prepared itself well ahead of any attempt to raise external funding. In recognition of all the hurdles, the company engaged consultants to redesign its strategy, which led to a long-term objective of setting up in-country plants that will add value locally to specific areas of its business. The company changed auditors by appointing a top-tier international audit firm as its auditors in 2010, several years before commencing the process of external funding. The company took visible steps to make compliance its strong point, embarked on several international quality standards certifications, overhauled its pay and grading system, and established a functional, decentralized structure. As one of the founding members of the board of directors explained it:

> *"we basically recognized a few critical things early on: (1) that if we want to grow, we must have solid partners; (2) that we can only be attractive to external partners if we meet certain minimum quality, ethical and corporate governance standards (having worked abroad for many years and given the poor perception of local companies); (3) that we must invest in capacity development; and (4) that raising capital to fund our equity in any long-term alliance will be a tedious process that may require foreign funds and divesting the current shareholding structure of our business. It was all about taking a very long-term approach"*.

FC went on to raise capital to fund its growth plans via a private equity investment and divestment of the shareholding of its founding directors in the short-term for long-term gains. The company has concluded the construction of its two plants and created a niche and major competitive advantage that will yield significant growth in the coming years. *The CFO summarised it by saying:*

> *"it took us about five years to be in a position where we could approach foreign investors and another two years or so to structure, go through due diligence, have lawyers and accountants drawing up investment agreements and finally raise private equity funds for the business; it is an accomplishment that very few local companies can boast of."*

I found that where the local company does not have access to funding, it relies heavily on the foreign firm to put up all or most of the funding required for an equity venture. This is discouraging to many foreign companies, especially in light of the regulation mandating majority of the shareholding to be local.

Finally, my findings show that the reserved funds by the Nigerian Content Development and Monitoring Board (NCDMB) for local capacity projects i.e., the Nigerian Content Intervention (NCI) Fund is not as accessible as expected. 1% of all industry spend and all contracts is deductible by regulation and payable by all contractors to the NCDMB for this purpose as some sort of taxation. The NCDMB then avails the funds via the Bank of Industry to local companies at single digit interest rate (7%-8% per annum as compared to 22%-24% per annum obtainable from local banks). Whilst the NCI fund is still more expensive than structured long-term funding available in developed countries (3%-5% per annum), it was designed to make funding capital projects more bearable for capable local companies. This fund has grown significantly over the last decade since the passing of the Act into law.

However, the fund remains largely inaccessible for many local companies, with only few being able to secure financing from this fund. It is extremely difficult to access, with several stringent conditions which many local companies are unable to meet. Although many local companies are unable to access the funds for similar reasons that they are unable to scale due diligence for equity joint ventures with foreign firms, even those with strong corporate governance structures do struggle to access the NCI fund. The Bank of Industry requires a guarantee from commercial banks as a condition for granting loans from the NCI fund to qualified local companies. In other words, the Bank of Industry only grants loans secured by another bank. The irony of this is that commercial banks are either unwilling to give such guarantees on grounds that they will be taking all the risk with no benefit, or where they choose to proceed, subject applicants to the same stringent requirements applicable if they were to avail the funds directly. A vicious cycle then ensues. In addition, the application process is tedious and lengthy, with limited communication and feedback loop on how applications are progressing. The uncertainty these create means it is not a particularly reliable source of funding for many local firms. Neither FC nor the target companies have been able to access the NCI, with each having to resort to private means of raising the capital required for their capacity development initiatives. An executive at FC indicated:

> *"if the NCDMB fund was readily available, we would not have gone through the tedious process of private equity funding. I can count the number of local companies that have benefited from this fund. It is unclear what they are really using the money for."*

This notwithstanding, FC did submit an application for the NCI fund to access working capital and nine months later, the application is yet to be approved.

Overall, my findings indicate that whilst regulation has brought about the required guidelines and set the direction to increase capacity development in the industry, it is yet to fully address the problems of structure, transparency, lengthy tendering cycle, limited human capacity and funding. These are all in addition to lack of trust, poor monitoring, and the lack of proper enforcement of the regulation. This has meant that loose alliances are still prevalent, bureaucracy remains unaddressed even post-regulation, tendering cycle remains very lengthy, and funding remains a major bottleneck to capacity-driven equity alliance formation even with the introduction of the Nigerian Content Intervention fund, due to its limited accessibility. The regulation has not addressed (and perhaps cannot address) the challenges of bad country reputation, insecurity (perceived and real), as well as the inability of most Nigerian companies to meet the standards required for partnerships with international firms. Figure 4.1 summarises the key findings pre- and post-regulation.

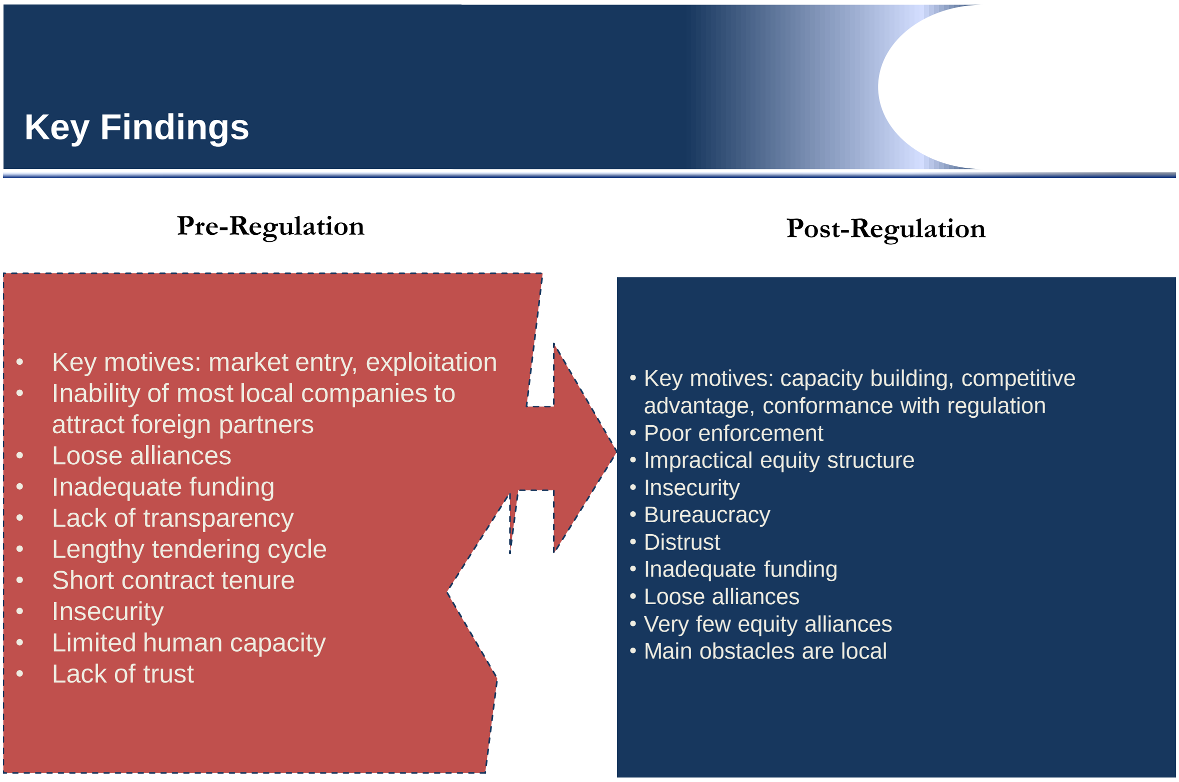

Figure 4.1 - Summary of key findings

From the preceding, the barriers to entry into the Nigerian oil industry remain very high, which in turn means fewer companies are able to, or willing to invest in long-term local capacity development via equity alliances, unless and until the major bottlenecks are addressed. Without an enabling environment to pave the way for more equity alliances, local capacity in the industry will continue at a snail pace.

5.0 PROPOSED SOLUTIONS

From my findings as discussed in the preceding chapter, some of the major challenges and bottlenecks from a regulatory standpoint, for which solutions are sought include non-compliance with regulation, high mandatory equity structure, lack of funding, limited facilitation, insecurity, lengthy tendering cycle, and lack of trust. For practitioners, the major hurdles include the unchecked use of local companies as local content vehicles by foreign companies, reluctance to pursue equity alliances, inability to attract foreign alliance partners and insignificant corporate political activity.

To achieve local capacity development, the right strategic alliances are required. For this to happen, key players in the industry have a huge role to play to overcome many of the challenges outlined in the preceding chapter. I have therefore grouped my proposed solutions, which largely stem from having conducted extensive interviews with various industry stakeholders and practitioners, into two main categories: (1) Regulator and (2) Local practitioners. The proposed solutions (regulator and practitioner) are summarized in Tables 5.1 and 5.2 respectively and discussed in detail below.

5.1 Regulator

In recognition of the need to increase local capacity in the Nigerian oil & gas industry, the Nigerian government enacted the Nigerian Oil and Gas Industry Content Development (NOGICD) Act in April 2010 (The NC Act for short), which established the Nigerian Content Development and Monitoring Board (NCDMB), vested with the responsibility to implement the provisions of the Act. This regulation has indeed brought about some notable changes and set the tone for the direction the industry should take. Ten years on however, the development is not at the expected pace, and progress has been faced with a myriad of obstacles.

RESPONSIBILITY	MAJOR ISSUES	SOLUTIONS	ANTICIPATED EFFECTS
Regulator	Non-compliance with regulation: Joint Qualification System (JQS).	Review qualification process. Review qualification criteria on the Joint Qualification System (JQS) portal. Conduct comprehensive audit of all registered companies on the JQS portal. Re-qualify companies based on revised criteria. Reduce number of 'portfolio' companies.	Achieve the objective of the JQS as industry platform for fair, fast, efficient, and transparent transactions. Integrity and reliability of the tendering process.
Regulator	Non-compliance with regulation: Nigerian Content Equipment Certificate (NCEC).	Review criteria for the issuance of the NCEC. Ensure only qualified companies in specific categories are issued with the relevant NCEC. Give more priority to companies with in-country investments. Disqualify companies without requisite certifications from tenders and bids. Get involved in project executions stages and not just award stages. Review alliance structures to eradicate questionable alliances. Introduce periodic capacity audit. Introduce penalties for regulation defaulters. Set deadlines for foreign companies operating solely as a foreign company. Increase administrative capacity to monitor and enforce compliance.	Confidence in the system. Achievement of the objectives of the NCECs.
Regulator	Low approval threshold.	Introduce full contract value disclosure to curb fragmentation of contracts.	Better compliance with the regulations and by extension more long-term alliances fostered. Visibility across the end-to-end contracting process.

Regulator	High mandatory minimum equity structure.	Revise the minimum equity threshold of 51% downwards for Nigerian companies in equity partnerships with foreign firms. Put measures in place for local companies to ramp up equity over a defined period.	More local companies able to build up equity stake gradually and avoid an "all or nothing approach". More genuine equity joint ventures or equity stakes by local companies. Rapid local capacity development.
Regulator/government	Dearth of funding.	Provide clarity over eligibility criteria for the Nigerian content Intervention (NCI) fund. Streamline application process for the NCI fund. Remove commercial bank guarantee requirement from criteria. Establish communication loop for the NCI fund. Prioritize sector for additional funding and capital injection. Central Bank to create specific pool of funds and/or mandate local banks to lend at single-digit interest rates for local capacity development projects. Introduce punitive measures (or interests) for delayed payment to local companies by the international oil companies and others. Introduce shorter payment term of no more than 45 days.	More credible local companies entering much needed equity alliances. More local companies engaging in more robust capacity building projects. Working capital and cash flow for local service companies. Better project funding. Rapid local capacity development.
Regulator	Lack of alliance facilitation.	Identify and collate credible Nigerian companies. Facilitate introductions between local and foreign firms. Create forums for alliance facilitation by identifying local and foreign companies in different segments of the value chain. Create and make forum for better collaboration between operators, service providers, regulators, and other industry stakeholders more purposeful.	More credibility, confidence, and trust. Increased interest in partnerships from potential foreign firms looking to operate in Nigeria. Better collaboration between operators, service providers, regulators, and other industry stakeholders. Consistency in the understanding of what

			capacity building truly means. Common platform for understanding and addressing industry challenges.
Regulator/government	Insecurity.	Address security concerns through continual dialogue, alongside immediate infrastructure development and providing employment. Avoid the use of force in suppressing peaceful protests by host communities against its operations.	Increased investment in the industry. Attract more equity venture partners into the industry. Rapid local capacity development. Reduction in unrests and project disruption.
Regulator	Lengthy tendering cycle and short contract tenure.	Reduce tendering cycle from the current 24 months to a maximum of 6 months. Standardize contract terms for major contracts with a minimum 3-year tenure. Standardize major award criteria under a mandatory split award system.	Increased investment in the industry due to ample period to achieve a return on investments. Avoid a skewed process where only a few benefit and others who qualify are locked out for a number of years. Fairness in the industry which in turn will encourage more investment.
Regulator	Lack of trust	Refrain from imposition of companies for award of contracts. Show transparency and fairness in the tendering process. Introduce an appeals process. Introduce concessions to companies whose in-country facility is commissioned before the award of a contract. Review and correct the current policy of total exclusion of non-category A companies from some tenders. Refrain from arbitrary cancellation of contracts mid-way through the tendering process. Remove bureaucracy surrounding access to key officers by industry practitioners.	More faith in the system. Increase in equity alliance. Increase in investment in the industry. Rapid local capacity development. Transparency.

Table 5.1 - Summary of proposed solutions for regulator

*5.1.1 **Enforce Compliance with Regulation***

The first step in enforcing compliance is a review of the qualification process. The number of companies currently pre-qualified for various services on the Joint Qualification System (JQS) on the Nigerian Petroleum Exchange (NipeX), the industry portal through which major tenders are published and processed, is mindboggling. The objective of the JQS to pre-qualify companies in specific service categories ahead of tender publication, and provide an industry platform for fast, efficient, and transparent transactions, is therefore not being fully met. A review and enforcement of qualification criteria on the portal will ensure integrity and reliability of the tendering process, whilst shortening the tendering cycle. Such a review should commence with a comprehensive audit of all registered companies on the JQS, and a re-qualification carried out with strict adherence to all pre-qualification criteria.

In the same vein, the number of companies currently holding various categories of the Nigerian Content Equipment Certificate (NCEC) is not necessarily commensurate with the level of capacity purported. This implies issuance of certificates to companies that are not necessarily qualified in such categories, thereby giving false impression of existing capacity and perpetuating non-compliance with the regulation. The NCEC is designed to be the industry validation of capacity levels within the industry and runs from Category A to D (with A being the highest and D the lowest category). A review of the criteria for the issuance of the NCEC will ensure that only companies that qualify in certain categories do indeed receive such certification. This review of the qualification processes should also lead to the reduction and/or eradication of 'portfolio companies' that are currently able to participate in major tenders and projects. More clauses should be introduced in tender requirements in general to give more priority to companies with in-country investments and facilities (as done for some services) and companies without requisite certification automatically disqualified. Companies who have taken the plunge and invested in capacity building should not have to grovel to qualify for relevant projects.

Further, the monitoring processes should be reviewed to be more involved in project execution as against contract award only. This will aid end-to-end monitoring and help in identifying and rooting out deliberate breachers of the regulation. By relying on the award stage of the contracts alone as currently done, it is wrongly assumed that the stakeholders are all complying with the directives. Closer monitoring of the expatriate quotas granted to those bringing in expatriates should be implemented. The process for reviewing the transition and succession plans should be tightened. Alliances should be better scrutinized to identify and eradicate questionable alliances i.e., alliances giving the impression of compliance with regulation when in reality, such are no more than agency arrangements. A deliberate review of all alliance structures with a view to eradicating such questionable alliances should be implemented. In addition, a system of periodic capacity audit should be introduced as part of ongoing monitoring of compliance with the regulation.

The current enforcement system appears to be administratively weak by relying mainly on external *'rents'* and thereby unwittingly diminishing administrative capacity. The administrative capacity of the regulator to monitor compliance should therefore be strengthened and stiff penalties introduced for defaulters. A deadline should be set beyond which no foreign company should be allowed to continue to operate in Nigeria solely as a foreign entity. A more effective monitoring and enforcement process will more than likely lead to better compliance with the regulations and by extension encourage more long-term alliances.

5.1.2 ***Remove Approval threshold***

The current practice requires that only projects and contracts in excess of $1million would require the prior approval of the regulator prior to bidding. This has led to deliberate fragmentation of contracts, making monitoring and enforcement very difficult indeed. Fragmentation means splitting contracts into smaller chunks to make each appear under the required threshold for the NCDMB approval. A more stringent approach and full disclosure irrespective of project value should be introduced. This will help stem the prevalent fragmentation of contracts and aid a more effective and efficient monitoring and enforcement process. However, to achieve this, the regulator's administrative capacity (as discussed in the preceding section) will have to be strengthened given the vast nature of what is required to effectively review and approve all contracts.

5.1.3 ***Adjust Mandatory Equity Structure***

The motive behind the mandatory majority stake holding by a local firm in equity joint venture is a noble one i.e., to encourage more local ownership of assets and local businesses. However, with the challenges facing local companies in funding their stake in such joint ventures, an organic approach should be adopted. A minimum equity threshold by the local company (much lower than the current 51% - e.g., 20%) should be set for such joint ventures to accelerate the alliance process that will lead to capacity development. Such minority stakes should be with the aim of enabling the local company to ramp up its stake over a defined period, which can be made mandatory. The review of the mandatory equity stake holding will enable gradual funding of joint venture or equity stakes by local companies.

*5.1.4 **Address Dearth of Funding***

Unless local companies have access to adequate funding, the quest for sustainable local capacity development will remain a pipe dream. Very few local companies have benefited from the Nigerian Content Intervention (NCI) Fund which was set up for the exact purpose of financing local companies with the right capacity development projects. The NCI Fund should be made more accessible to local companies. The application process should be streamlined, bureaucracy removed, and communication loop established. The requirement for a commercial bank guarantee that has created a major bottleneck should be removed. Other forms of monitoring such as position on the board of directors should be considered. Priority should be given to companies that have invested or raised part of the total funding required. Access to the NCI Fund will enable more credible local companies enter much needed equity alliances for local capacity development purposes. The Central Bank of Nigeria should create an additional pool of funds and/or mandate local banks to provide financing at single digit interest rates for the sole purpose of local capacity building within the industry. Capacity cannot be developed sustainably without consistent stimulation of the sector. The government will need to prioritize the sector for capital injection by making additional provisions in its budget.

Many international oil companies (IOCs) that are serviced by the local service companies are a law onto themselves when it comes to payment. The situation is even worse with local companies who tend to delay payments indefinitely for services rendered and in violation of agreed terms. Unfortunately, there is currently no means of ‘checking’ the typical delays in payment even after the contracted payment terms, which currently range from sixty to ninety days officially, but which in reality could be longer than six months. The regulator should introduce punitive measures for delayed payments outside agreed payment terms. Interest should be chargeable by contractors where payment is late. A shorter payment term of no longer than 45 days should be introduced and enforced. This will ease working capital and cash flow for local service companies and aid project funding.

5.1.5 The Regulator as Alliance facilitator

The Nigerian Content Development and Monitoring Board (NCDMB) should aim to facilitate introductions of credible Nigerian companies to foreign firms for the purpose of partnerships i.e., foster and facilitate alliance development more visibly. Targeted foreign companies in various segments of the value chain can be invited to meet with invited local companies much in the same way that some foreign embassies do via their chambers of commerce. Local companies to be invited should be vetted thoroughly to assure the integrity of the process. Such *match-making* approach, driven by the regulator will have more credibility and instill confidence and trust in potential foreign firms looking to operate in Nigeria.

In addition, the regulator should initiate and make forums for better collaboration between operators, service providers, regulators, and other industry stakeholders more purposeful. In other words, regulator-facilitated interactive sessions to share learning/lessons will aid consistency in the understanding of what capacity building truly means and provide a platform for a common understanding of the challenges.

5.1.6 Improve Security

Both real and perceived security issues exist in the industry and in Nigeria as a whole. While foreign companies have been operating in the same environment for decades (and continue to do so), it is difficult to attract new equity venture partners into an environment that is considered unstable and/or volatile. Concerted effort is required from the government to make the environment more safe and secure. More visible and deliberate policies on security aimed at instilling confidence in industry participants and investors in the area of security are needed. The security situation should be addressed through continual dialogue, alongside immediate infrastructure development and provision of employment. The use of force in suppressing peaceful protests by host communities against its operations should be avoided, even if oil production is disrupted. It is the duty of government to enforce law and order - at the same time respecting the human rights of its people. In areas where armed crime and lawlessness are prevalent, the government must continue to provide policing.

5.1.7 Shorten Tendering Cycle and Extend Contract Tenure

The current tendering period of 18 months to 2 years is both a threat to existing alliances and an obstacle to potential ones. A maximum tendering cycle of 6 months should be introduced. This is achievable if bureaucracy is removed and if the proliferation of portfolio companies is addressed as part of the review of the qualification process discussed in previous sections. Currently, the contract tenures are vague and subject to the decision of the awarding oil company. Contract tenures should therefore be standardized for major contracts, with a minimum period on 3 years. This will further allow investing companies to project better and see the viability of ample and timely return on their investment. Longer contract terms will also enable sustainable knowledge transfer. The major contract award criteria should be standardized under a mandatory split award system. Currently, the decision as to whether or not a contract will be a multiple award (i.e., awarded to more than one technically qualified bidder), varies from contract to contract. A standardized system will prevent a skewed process where only a few benefit and others who qualify are locked out for a number of years.

5.1.8 ***Establish Trust***

The prevailing distrust amongst practitioners within the Nigerian oil & gas industry as a bottleneck within the alliance formation (and by extension the capacity development) process, cannot be overemphasized. The solution appears to be in our hands given that many of the prevailing challenges are internal to the industry itself. The following recommendations therefore seek to address trust within the operating environment (i.e., regulator and operating companies).

Firstly, the regulator should remove itself from imposing any company as this implies unfairness and breeds distrust. The regulator should stick to being an effective umpire rather than a partaker in the tendering process. Transparency and fairness in the tendering process must be given priority to completely eradicate scenarios where qualified companies are excluded from the process while others not qualified are allowed to progress.

Secondly, an appeals process should be introduced for companies who have genuine cases. The industry does not allow such at the moment, making it a closed process. For example, where a company that qualifies in a particular category is excluded for whatever reason, an appeals process should exist for such a company to legitimately put its case forward. A system that does not allows any sort of appeal as is currently the case in the Nigerian oil and gas industry, gives no room to correct genuine (and deliberate) mistakes in the tender evaluation process.

Thirdly, for companies whose in-country facility is still in progress but to be commissioned before the award of a particular relevant contract, concessions and/or waivers should also be granted to progress through the tender stages, where such companies meet all other requirements of the tender. With longer contracting tenures, a company that is yet to achieve the required capacity level to justify the issuance of a Category-A certification for instance but expects to complete this before the completion of a particular tender should not automatically be locked out of such opportunities that may aid the return on their investment. Instead, a kind of 'provisional pass' should be introduced, subject to the attainment of the required certification by the time the tender is finalized. Fairness in the entire process will in turn encourage more foreign companies to have more faith in the system. The current policy of total exclusion of non-Category A companies from some tenders should be reviewed and corrected. There was a reason behind the A-D categorization in existence and so progressing on tenders for Category A companies should not be to the exclusion of all others. A balance must be struck between giving Category-A companies priority, and not creating monopolies at the expense of other potential entrants into the market. A portion of contracts can be mandatorily reserved for such Category A companies, while the remaining portion can be earmarked for other companies with lower certification (unless the Category A company is commercially superior, in which case the full contract can be awarded).

Fourthly, arbitrary cancellation mid-way through tenders should be eradicated. Whilst there will always be exceptions, the trend to abandon or cancel tenders will have to be reversed if the industry is to attract additional alliance partners, and therefore additional investments. In cases where such is unavoidable, a method of compensation for tenderers, where such tenders are at advanced stages should be introduced. Again, this will further create an environment of fairness.

Lastly, the regulator should make itself more accessible to industry practitioners, especially local companies. The current bureaucracy surrounding access to key officers and decision makers within the regulator should be removed. Accessibility provides more transparency and fosters trust in the system.

In conclusion, from the regulatory perspective, there is a pressing need for a review of the monitoring and enforcement policies and structure, a purposeful improvement to security challenges, direct involvement of the regulator in facilitating alliances, access to funding, and establishing trust. These will in turn stimulate an environment that will be more attractive to foreign companies and pave the way for more alliances that are designed for the long-term, such as equity joint ventures. Only then can sustainable local capacity be developed.

5.2 **Practitioners**

To develop local capacity, practitioners (specifically local companies) have a significant role to play. I have grouped this into (1) Focus on equity alliances; (2) Adopting the right alliance motive; (3) Improving the quality of local companies; and (4) adopting corporate political activity. It should be noted that all four recommendations are interwoven and should not be seen as independent variables.

RESPONSIBILITY	**MAJOR ISSUES**	**SOLUTIONS**	**ANTICIPATED EFFECTS**
Practitioners	Local companies used as one of several local content vehicles (LCV) by some wholly owned foreign firms only to comply with local regulations. Wholly owned foreign companies not compliant with local content regulations.	Propose long-term alliance. ‘Sell’ value of equity alliance to foreign companies operating locally as a win-win strategy.	A win-win solution to both local companies and non-compliant foreign companies. Increase in equity alliances and capacity development.
Practitioners	Reluctance to pursue equity alliances.	Learn from and leverage value derived from existing equity alliances in the industry to form similar alliances.	Access to technology and joint funding of major capacity development investments which local companies could otherwise not achieve on their own. More capacity development amongst local companies.
Practitioners	Inability to attract foreign partners.	Take a long-term view and abandon agency or commission-based alliance structures. Have a detailed organization structure that shows that company is not a one-man band. This should include (but not limited to) a properly constituted board of	Better credibility for local companies. More local companies will become attractive to potential foreign partners.

RESPONSIBILITY	MAJOR ISSUES	SOLUTIONS	ANTICIPATED EFFECTS
		directors, a credible and qualified management team, and qualified professional staff. Put succession plans in place. Have an audit firm with international standards and recognized by and acceptable to international companies. Put ethical and compliance policies in place. Ensure all statutory filings and taxes are made with evidence. Respect all contractual terms, agreements, and obligations. Seek credible financial and legal advice (which can be costly). Demonstrate local market knowledge and value proposition to any proposed alliance. Put a clear plan in place for local capacity building through proposed alliances. Demonstrate willingness for a win-win approach for both themselves and their alliance partners.	Rapid local capacity development.
Practitioners	Limited Corporate Political Activity (CPA).	Adopt a proactive approach towards CPA. Put structures, processes, and incentives in place to integrate CPA into marketing strategies. Direct CPA should towards the right political decision-making body. Determine where more beneficial to conduct CPA alone and where more advantageous to do so collectively.	Local companies become more attractive to potential foreign partners. Desired changes to the regulation effected. Formation of new policies and regulations in ways that can benefit the industry.

Table 5.2 - Summary of proposed solutions for practitioners

5.2.1 Focus on Equity Alliances

Alliances with foreign Original Equipment Manufacturers (OEMs) have been central to many local companies' strategy, initially as a market entry approach, and subsequently to gain competitive advantage. These were predominantly loose alliances via representation agreements. Post-regulation, forward thinking local companies have recognized the need for stronger, long-term alliances in order to bridge the gap in their knowledge. It is recommended that local companies focus on forging equity alliances as against the hitherto prevalent loose alliances. Equity alliance will enable more access to technology and joint funding of a major capacity development investments which local companies could otherwise not achieve on their own. With equity alliances, more 'local champions' with true capacity will emerge in the Nigerian oil and gas industry.

Foreign companies operating in Nigeria via a myriad of local content vehicles (LCVs) used to 'comply' with the regulations, but without any Nigerian ownership should be targeted by local companies. As my findings have shown, on one hand, foreign companies operating in Nigeria without any real local ownership do not have a sustainable future in the country. Such foreign companies do recognize that the situation is short-lived and will be compelled to address this sooner or later, especially if the recommendation to change the mandate put forward in this paper is implemented by the regulator. On the other hand, local companies working with loose alliances are unlikely to be able to develop any real capacity and therefore put themselves at a disadvantage as the industry evolves. As such, it is recommended that the local companies leverage the power of The Act to propose long-term alliances based on equity ownership that will provide a win-win for both the local and foreign firms.

5.2.2 Adopt the Right Alliance Motives and Equity Structure

As already indicated, for the Nigerian oil and gas industry to utilize indigenous material and human resources and increase local participation, knowledge and technology transfer must be attained. Without the right motive, the required equity alliances described in the preceding section cannot be achieved.

It is recommended that companies and practitioners in general adopt learning, knowledge transfer and local capacity development as central motives when considering strategic alliances. This applies as much to local companies (who lean too much on a commission structure), as to their foreign counterparts (whose primary motive tends to be conformance with regulations, even if it means just putting up a front). In so doing, a win-win situation can emerge, where local companies have access to much required training, expertise, technology, and co-financing. Foreign companies on the other hand gain access to local market knowledge, conform with regulation and have a long-term avenue for generating profits without necessarily deploying expatriates indefinitely.

The local company should ultimately aim to retain at least 51% of the equity. This will make the joint venture a 'local' company and therefore benefit from the inherent advantages created for local companies by the Act. Nevertheless, where funding is a challenge, and 51% cannot be achieved, this should not be a deterrent. A lower stake should be taken with a clear understanding and agreement on how to ramp up to the desired equity threshold over a given time period. An "all or nothing approach" should be avoided as this can only continue to lead to a zero-sum game.

5.2.3 ***Improve the Quality and Structure of Local Companies***

Many local companies are still ill-prepared for the types of alliances that are needed for local capacity development. This is because many do not meet the minimum requirements either for partnerships with foreign firms, or to attract private investment that can help in building capacity. For local companies to become attractive to potential foreign partners, they must conform to the most basic of requirements in order to scale the inevitable stringent due diligence process imposed by foreign firms. To achieve this, local companies must take longer-term approach to strategic alliances and abandon the 'quick-win' mentality. Proper organization and corporate governance structures should be put in place in the first instance. Successions plans must be in place as well as clear policies on all compliance and ethical issues. Local companies should endeavor to appoint auditors that are acceptable to international firms with a track record of audited accounts for a few years ahead of any proposed equity joint venture. Local companies should be able to show evidence of compliance with all statutory payments and taxes. Finally, they must be willing to spend on the right, professional financial and legal advice, not only to ensure they are well prepared, but also to ensure there is little or no room for their own exploitation.

5.2.4 ***Adopt Proactive corporate Political Activity***

Corporate political activity (CPA) has grown in its significance and impact on a firm's performance, and this is largely through the firm's ability to influence policy decisions. A proactive approach towards CPA should be adopted by more practitioners in the Nigerian oil and gas industry. This will help in effecting the desired changes to the regulation outlined earlier in this paper and in influencing the formation of new policies and regulations in ways that can benefit the industry. Practitioners should seek to integrate CPA with their marketing strategies and ensure that their CPA is directed towards the right political decision-making body. This means the Nigerian Content Development and Monitoring Board (NCDMB) in the first instance for the oil service sector. Practitioners should also pay special attention to determining the type of structures, processes, incentives, and activities that are required for their firms to integrate their CPA with their marketing activities. Finally, practitioners should determine where it is more beneficial to conduct CPA alone and where it is more advantageous to do so collectively.

It should be noted that the bulk of the proposed solutions lean more towards the regulator. This is because of key findings from this study relating mostly to challenges with existing policies, as well as the need for effective review, implementation, monitoring and enforcement of regulation.

I conclude that a conducive policy-driven environment, with commitment to fairness, monitoring and enforcement by the regulator, visible improvement to security, access to funding, the right motives, in addition to better preparation by local companies, will lead to the creation of a level playing field, engender trust, and facilitate long-term equity alliances which will in turn aid the development of local capacity at a steady pace.

6.0 DISCUSSION AND SOLUTION EVALUATION

6.1 Discussion

Historically, alliances in the Nigerian oil & gas industry were predominantly loose via basic short-term instruments such as agency, representation, or project-specific agreements. Foreign companies operating in Nigeria were not mandated to work in partnership with local companies or indeed develop any real capacity in the country. Alliances between local companies were rare with those that existed largely single project-based.

The Nigerian Oil and Gas Industry Content Development (NOGICD) Act was signed into law in April 2010 (The NC Act 2010 for short), and with it came the establishment of the Nigerian Content Development and Monitoring Board (NCDMB). The Act can be seen as the best thing for local content development since oil was found in Nigeria in 1956. The NCDMB has changed the face and direction of the industry. Nevertheless, the development of local capacity has not been at the expected pace and progress has been faced with a myriad of obstacles. On one hand, loose alliances seem unsuitable to longer-term planning required for local capacity development. On the other hand, even after the enactment of the regulation, several obstacles still exist, which are getting in the way of much required equity alliances that will aid local capacity development.

The theories available in literature do not entirely explain what is happening in the Nigerian oil and gas industry with regards to alliances and capacity development. In other words, there is a partial understanding regarding the research question by looking at the literature, with the possibility of other alternatives that can be explored to aid understanding. I chose to look at the Resource-Based View and the Knowledge-Based View as being the most relevant to my research question because my interest is in how organisations go about developing capacity through sharing each other's resources and how learning can be achieved via collaboration.

The two theories address market failures as a main reason why alliances exist. For the resource-based view, it is the limited availability or unavailability of resources as well as the imperfect mobility of resources that make the use of the market difficult (Peteraf, 1993). However, according to the knowledge-based view, it is the improbability of fully utilizing knowledge on the market that makes markets insufficient (Grant and Baden-Fuller, 1995). Irrespective of viewpoints, the utility of the market is limited and forces firms to either internalize or reach out to other firms to achieve their goals. If markets and own operations are not viable alternatives, firms must reach out to other firms through collaborations such as alliances.

Alliance Classification

Prior research suggests two main alliance types: those involving the creation of equity transfer and those not involving any form of equity (Alter and Hage, 1993; Doz and Hamel, 1998; Teece, 1992; Gulati ,1995 Hagedoorn, 1993; Das and Teng, 1996). Non-equity alliances have been prevalent in the Nigerian oil and gas industry, especially before regulation was introduced. Very few joint ventures exist between local and foreign firms, and outright acquisitions are still extremely rare. Equity partnerships are almost non-existent between local firms. According to literature, alliances of strong equals are more likely to succeed than those between competitor, between weak and strong firms and between weak firms (Bleeke and Ernst, 1991; Kanter, 1994; Archbold 2000; Christ, 2016; Panova, 2018). In contrast however, alliances of strong equals are rare in the Nigerian oil and gas industry, given that most alliances are between foreign and local firms, with the former being the stronger party. Successful alliances in the Nigerian oil industry have been between the weaker local firm and the stronger foreign one.

Alliances of strong equals are difficult to find in the industry. In addition, the bottlenecks with alliances in the Nigerian oil industry do not necessarily reside in one side in the alliance being weaker and the other stronger, since very few alliances long-term alliances are being formed. The challenge is the lack of the right alliances in the first instance, which is down to a host of regulatory compliance, enforcement, and security issues, in addition to the inadequacies of local companies as enumerated in the Findings chapter of this study.

Previous findings in literature have also shown that with a short-term orientation, alliance performance evaluation will rely heavily on financial and market-based indicators, whereas when partners adopt a long-term orientation, they view the alliance as at least semi-permanent i.e., as an entity that will grow and adapt to the changing environment in the future (Panova, 2018; Kong (2018); Brouthers et al, 2017; Kumar, 2014). These findings also suggest that firms will tend to exploit the alliance and their partners for their private interests in the absence of sufficient cooperation.

However, my findings show that financial indicators are most visible in the evaluation of alliance performance in the Nigerian oil and gas industry, regardless of whether short-term or long-term. Commitment wanes over time because of this. Opportunistic behaviours are not uncommon among partner firms in Nigeria, especially the local firms who tend not to abide by the terms of agreements or approach their partner's competitors for collaboration, thereby creating conflicts of interest and jeopardizing existing partnerships. Where the alliances have worked, a close working relationship over a number of years played an important role. Some of these include joint client visits, joint road shows and joint exhibitions at conferences and industry events, which are seen as integral to operating alliances. As these progress into joint ventures and other longer-term partnerships, expectations are less misaligned, and objectives are better articulated. Companies entering such equity alliances tend to have worked together for some time, trust established, and prior, extensive due diligence conducted on the local company. More structured evaluation process is seen in equity alliances where a more long-term approach exists. Evaluation of such binding alliances covers other parameters beyond short-term financial performances. These include training, knowledge transfer, technology transfer, reduction in expatriate quotas, relationships, and alignment of goals.

Motives

As discussed extensively in Chapter 2, several previous works have provided several reasons for alliance formation. Mariti and Smiley (1983) identified a few core strategic motives for joint alliance formation. Harrigan (1988) takes a broader view of the motives for strategic alliance formation, grouped into internal benefits, competitive benefits, and strategic benefits. Das and Teng (1996b); Andersen (2015); Wandebori (2018); Grant (2003) cite risk-sharing, product rationalisation, economies of scale, technology transfer, international expansion, conforming to government policy, shaping competition, and gaining competitive advantage as some of the primary motives in alliance formation.

Although the literature provided some basis for reviewing the motives for alliance formation in the Nigerian oil industry, the motives for alliance formation in the Nigerian oil and gas industry vary from pre-regulation to post-regulation, and from local company to foreign firm. What is not covered in literature is how regulation can indeed influence motives for alliance formation, especially when viewed with different lenses, depending on whether the alliances partner is a local or a foreign company.

Risk sharing

On risk-sharing, the literature implies that alliances of this type often provide for the management of the operation by one of the partners, while the other merely contributes capital and absorbs some of the risk failure (Glaister and Buckley,1996); Dussauge et al, 2000; Kumar, 2014). In contrast, my findings showed that alliances where one party only contributes capital rarely exist in the Nigerian oil and gas industry. Risk-sharing did not feature as a major alliance motive, even with the inherent risks in the environment. The prevalent loose alliances tend to adopt a risk avoidance approach as against risk-sharing. This may change as the industry begins to embrace equity alliances. Risk avoidance (via loose alliances) as against risk sharing as depicted in literature seems relevant in the context of alliances in the Nigerian oil and gas industry.

Economies of Scale

Strategic alliances are expected to allow firms in the same industry to rationalise production, thus reducing costs through economies of scale and learning by doing (Mariti and Smiley, 1983). However, in the Nigerian oil and gas industry, cost reduction was not seen as a key motive for alliance formation in both equity and non-equity alliances. This contrast was surprising given the high cost of doing business in an environment as uncertain as Nigeria. It suggests that in some sectors in a developing market, economies of scale may not necessarily play an important role or be a major motive in the alliance formation process as implied in some literature.

International Expansion

Most international business literature focus on three distinct modes of entry into a foreign market: licensing or franchising, joint venture, or setting up a wholly owned subsidiary (Barkema et al, 1996; Lonrenzoni and Lipparini, 1999; Dyer & Nobeoka, 2000); Dussauge et al 2000).

Prior to the enforcement of local content regulations, international expansion was the primary motive for foreign companies who ventured into the Nigerian market. However, the lack of regulations meant there was little or no incentive for any long-term commitments and foreign companies were still able to operate without necessarily having a local partner, although it was generally recognized that local knowledge was resident with local companies and a key attraction to foreign firms who have expanded into the region.

Whilst licensing/representation agreements are prevalent due to the loose nature of most alliances, no franchising exists in the Nigerian oil industry. Wholly foreign-owned subsidiaries do exist although those are expected to start falling foul of local content regulations. Although in line with some parts of literature, licensing and wholly owned subsidiaries were found to be the modes of market entry for foreign service companies operating in the Nigerian oil industry, this will not be sustainable. As emphasis shifts to local content development, attention is expected to shift to equity alliances, in line with my findings. Again, the role of regulation (and the regulator) in driving alliance types, structure and motives appear to be underplayed at best in existing literature. Whilst regulation will indeed compel companies to come together in ways that will be compliant with the stipulated rules, irrespective of individual company motives, this cannot be achieved without an active role by the regulator.

Knowledge Transfer

Literature shows that alliances can provide strategic benefits from the exploitation of synergies, technology, or other skills transfer (Williamson 1981; Ahuja, 2000a and b; Gulati, 1998; Kraatz, 1998; Kong, 2018). I consider this being critical for local capacity development and should be the primary motive for local companies seeking alliances with foreign companies. This means emphasis must shift from loose alliances to long-term structures like joint ventures involving equity. In such partnerships, the local company retains at least 51% of the equity for the venture to be considered 'local' and therefore benefit from the inherent advantages created for local companies by regulations. However, where such majority stake is not viable due to financial limitations, local companies should consider a lower stake, while ramping up over time.

For the focal company in this study, local capacity development and gaining competitive advantage (the latter is discussed later) were the most prominent reasons for entering into long-term equity alliances and joint ventures. Training, access to technology and financing are also core motives. Capacity building broadly implies a dynamic process which enable individuals and agencies to develop the critical social/technical capabilities to identify and analyse problems and proffer solutions. Local companies do not generally believe foreign partners have knowledge or technology transfer as a motive but are only compelled to form alliances by regulations if they wish to operate in the Nigerian market. Motives for foreign companies currently operation in the Nigerian oil and gas industry are therefore, predominantly to comply with regulations. This is less of a motive for local companies who are already compliant with such regulations by default.

Nevertheless, a conducive policy environment is critical to the accomplishment of any capacity development objectives within the Nigerian oil and gas industry. For years, many local companies have been comfortable with being commission agents and have shown little interest in longer term alliances aimed at capacity development via knowledge and technology transfer. If indeed the industry is to utilize indigenous material and human resources, increase local participation, or even enable backward and forward linkages to other sectors of the Nigerian economy, then knowledge and technology transfer must be attained. However, such cannot be achieved in the short-term. And since requisite expertise and technology reside largely with foreign companies, only the right alliances can lead to the desired position. I see equity alliances with foreign companies as the only way to achieve this.

Whatever the case may be, for true longer-term alliances to be formed, the desired motive must be knowledge and technology transfer with a view building local capacity. Although some findings have suggested that learning is likely to be an important factor in the overall alliance success even where it is not the primary reason for creating an alliance (Makhija and Ganesh, 1997), this is yet to become the real and practical motive for most alliances in the Nigerian oil industry. To achieve the desired level of local capacity development, knowledge transfer and learning need to be central to alliance formation in the Nigerian oil and gas industry.

Gaining Competitive Advantage

For many small companies, the only way they can stay competitive, thrive and even survive in today's technologically advanced, ever-changing business world is to form an alliance with another company or companies. Successful alliances within the Nigerian oil industry that are indeed shaping competition are equity alliances. Such ventures are setting the tone, pace and direction that the industry sometimes go and are even influencing implementation of regulations. Such alliances have forced the regulator into action via enforcement and prioritization of contract awards. This agrees with existing literature which indicates that alliances can influence who a firm competes with and the basis of competition (Contractor & Lorange, 1988; Chuang et al, 2015; Hamel, 1991). Such equity alliances have also gone on to create competitive advantage for partnering firms in the form of increased market share, a more robust product mix, stronger human capital, and access to financing. The creation of competitive advantage is a core motive in the rare cases where local companies that have come together.

Notwithstanding, in the Nigerian oil industry, local firms hardly come together to combine resources as a means of putting pressure on a common competitor. This is in contrast with literature that suggests that alliances can blunt the abilities of competing firms to retaliate by binding potential enemies to the firm as allies or used as an offensive strategy by linking with a rival in order to put pressure on the profits and market share of a common competitor (Porter and Fuller, 1986; Parkhe, 1993; Harrigan, 1988; Chuang et al, 2015). Coopetition is not an adopted approach in the Nigerian oil industry. As alliances in the industry shift towards the long-term view, local companies who embrace equity alliances and develop local capacity will gain stronger competitive advantage.

The Trust Element

Finally, according to literature, trust remains central to successful long-term alliance formation and this is certainly true of the Nigerian oil and gas industry. The distrust in the environment itself, and among the local companies that are looking to form long-term alliances with foreign companies is all too evident. Although both relational and performance risks discussed in Chapter 2 are evident in the Nigerian oil industry context, relational risks appear to be more of a challenge. The former refers to the concern of a partner about possible default by the other partner, while the latter refers to the possibility and consequences that the objectives of the alliance are not successfully achieved, although the partners cooperate fully. Where literature appears to come short is in not highlighting circumstances under which one risk may be more prominent than the other. In the case of the Nigerian oil and gas industry, relational risk is more evident as a bottleneck in the alliance formation process and so practitioners and regulator will need to focus on this risk to address the trust issues that have plagued the industry for many years.

According to literature, managers of strategic alliances must create and maintain an environment of trust (Gimba, 1996; Barney and Hansen, 1994). Others suggest that high levels of interim trust and complementarity of resources are essential conditions (Kanter, 1994). As highlighted in Chapter 2, inter-firm trust helps reduce the concern about opportunistic behaviour (Ring and Van de Ven, 1992). But again, literature does not say much on the role of the regulator in a developing country in instilling trust to facilitate alliance formation, perhaps because most alliance literature have been in the context of developed, clear and well-functioning institutional environments. The role of local companies in attracting foreign partners for alliances is also not specifically addressed in the literature. This has been identified in this paper as being critical to alliance formation and success in specific settings. Many of the solutions put forward in this study are geared ultimately towards establishing trust in the Nigerian oil and gas industry both in terms of the regulatory system and the quality, credibility, and sincerity of local companies in order to foster more effective strategic alliances.

Corporate Political Activity

An important revelation from this study and from which a lot can be learned, is the relevance of Corporate Political Activity (CPA) in effecting the desired changes to existing regulations as well as the formation of future relevant policies in the Nigerian oil and gas industry. CPA is defined as corporate attempts to shape government policy in ways favourable to the firm (Baysinger, 1984). As such, the more practitioners take CPA seriously and as part of their marketing strategies, the higher the likelihood of positively impactful policies. Companies who become more adept at utilizing CPA may end up creating even further competitive advantages for themselves. But literature on CPA is not necessarily linked to strategic alliances and/or local capacity development. By embracing CPA and/or demonstrating strong CPA, a local company can become even more attractive to potential alliance partners.

Alternative theoretical perspectives may help in further understanding and addressing the research question at the heart of this paper. Distinction should be made between CPA, favouritism, and corruption. High levels of corruption have been cited as partly the reason why many resource-rich countries tend to perform poorly in terms of economic development despite their natural wealth (David-Barrett and Okamura, 2016). David-Barrett and Fazekas (2019) outlined three spheres of the procurement process which players seeking to engage in favouritism aim to control: the formation of public procurement law; the implementation of procurement by the bureaucracy; and the monitoring of implementation, which includes audits, complaint mechanisms, and scrutiny by civil society organizations and the media. Although the perspective presented was aimed at partisan favoritism, parallels can be drawn with what is prevalent in the Nigerian oil and gas industry when considering factors hindering the achievement of the local capacity development initiatives. From my findings, the existence of different rules for different players in the industry, the presence of unqualified bidders on some tenders, the creation of policies to the exclusion of some and the inadequate monitoring of compliance combine to present a challenging picture of possible corruption. Some of these even create legal frameworks which may unfairly benefit a captor group into the long term, but without requiring them to break laws or violate rules each time they benefit (David-Barrett and Fazekas, 2019). Institutional controls and transparency are therefore required across board to ensure the integrity of the policies and engender the much-required trust within the industry.

6.2 Solution Implementation and Evaluation

Implementation and evaluation of some of the solutions within the focal company was achieved directly by revising the company's strategy and renewing focus on equity alliances. The company has now entered an equity joint venture with a foreign partner to develop capacity in the areas of machining, casing, tubing, and piping for downhole operations in the industry. Accessing resources that was not available to the focal company on its own as well as knowledge creation and integration formed the basis of this joint venture. The equity alliance has enabled the focal company to become only the 5th company in the entire industry to attain a category A certification status in this area of service, thus enhancing its competitive position in the industry,

In addition, discussions are at advanced stages to form yet another equity alliance in the Valves division within the focal company. Prior to now, a technical service agreement existed between the focal company and its foreign technical partner. The value of an equity partnership was subsequently 'sold' to the partner with a view to providing access to knowledge that will aid the focal company in becoming the first company to manufacture valves locally for the oil and gas industry. The impact of this alliance is expected to be beyond the shores of Nigeria and yet again, create further competitive advantage for the focal company. Furthermore, the focal company has presented value and benefits of equity alliances to two foreign companies operating in Nigeria without any form of local ownership. It is anticipated that these discussions will pave way to a joint venture between the focal company and at least one of the two foreign entities, leading to further growth and competitive advantage for the focal company. This will be further evaluated after this study. Finally, the focal company has raised its game in the Corporate Political Activity (CPA) arena by engaging the regulator more purposefully and more directly. This has paved the way for more rapid progress both in securing relevant Nigerian Content equipment Certificates (NCEC) and advancing in its application for the Nigerian Content Intervention (NCI) fund. The results being achieved in the areas of cooperation, NCI access and smoother processing of waiver application is evidence of success from a proactive adoption of Corporate Political Activity. It is also evidence that a firm's performance can be improved with its ability to influence policy decisions in ways that are favourable to the firm. This revelation has influenced the focal company in creating a marketing strategy that incorporates CPA with the plan to use this both as a tool to implement the solutions in this paper, and to gain competitive advantage.

For the target companies, the disruptions to schedule due to the COVID-19 pandemic meant actual, practical implementation could not be evaluated in full, although it is expected that the solution will be achieved over time and further evaluated after this study. Impact from the proposed solutions should be visible within five years. Nevertheless, some level of evaluation was be achieved via follow-up interviews to discuss the solutions. These final interviews focused on the recommendations and solutions from the study and interview questions were geared towards 'testing' the proposed solutions in a broad sense. All the target companies agreed with the proposed solutions during the follow-up interviews, especially taking into consideration that they were an integral part of the research into the identified problem areas. Target company 1 agrees that their equity joint venture with a foreign firm has paved way for growth and capacity development and intends to adopt a similar approach across its other business units where doable, much like the focal company. As stated by the founder, *"our success with an equity partnership has proven that it is the only way to develop local capacity and we intend to replicate in other parts of our business as far as it is practical to do so".*

Target company 2 agrees with the role CPA can play and is already ahead of the game in terms of equity alliances, not only in terms of its foundation as emerging from a joint venture, but also through its many acquisitions post-regulation. According to the CEO:

> "*we understood the need for real equity partnerships from the very onset and before regulations came in. It is clear that the solutions you have put forward are the way to go and in line with what we plan to do; we may however tweak some things in some of the areas you have highlighted"*. He concluded that *"I totally agree that industry actors need to get closer to the policy makers if we are to achieve the desired outcomes".*

As a foreign company operating in Nigeria without any local equity, Target company 4 agrees totally that the proposed solution via equity partnership is the only way they can have a sustainable business in Nigeria.

> *"If more local companies adopt your recommendations, surely we will have more options for the much-required equity partnership"*, the country manager stated. He further added: *"it is my hope that the regulator takes your proposals very seriously, especially in the areas of trust, fairness, transparency, contracting cycle and security because implementation will change the face of this industry in terms of local capacity; but that too will require some serious lobbying"*.

As part of a practical solutions evaluation, the focal company has presented a proposal to Target company 4 as a primary candidate for equity partnership, highlighting many of the solutions put forward in this paper for local practitioners. *"Your proposal as a possible equity partner for instance is being reviewed very seriously by our parent company. It is the first of such we have received and being considered very seriously",* the country manager added.

With the regulator, although strong interest in the research had been indicated throughout the various stages of the study, the implementation and adoption of the proposed solutions are expected to take a different and even more challenging path. Firstly, bureaucracy and resistance to change will need to be overcome via continued 'selling' of the benefits of the solutions and engagement at the most senior level. This process already commenced with the follow-up interviews. That said, follow up interviews with the study participants revealed an alignment and consensus on the need to increase Corporate Political Activity to get the regulator to act swiftly. Again, this will be further tested on an ongoing basis following the study. In addition, the white paper presented to study participants was well received as a succinct summary of key issues and solutions. As echoed by a regulator executive,

> *"the paper you have put forward is short, concise and to the point. Although it may take some time to cross some usual hurdles, the paper provides practical and implementable solutions that will impact the entire industry and who knows, maybe even beyond the oil industry*".

Further engagement with the regulator via active participation by the author at local content workshops and conferences is expected to provide visibility for the solutions and an industry-wide acceptance.

In conclusion, unless the regulatory board, the Nigeria Content Development and Monitoring Board (NCDMB) bridges the gap via enforcement of regulations, eradication of questionable alliances, creation of a level-playing field and facilitation of alliances, and unless local companies restructure themselves to meet the minimum criteria required by potential international partners in order to be more attractive for stronger partnerships, longer-term alliances and by extension local capacity development in the Nigerian oil & gas industry will continue to be hindered.

7.0 CONCLUSIONS

The practice in the Nigerian oil and gas industry over the years has been to utilize foreign companies to carry out major projects. This meant little or no consideration for local capacity development. As emphasis begins to shift to local content development, an alternative approach is required to achieve the desired objectives. The Nigerian Oil and Gas Industry Content Development (NOGICD) Act (The Act) was passed into law in 2010 with the aim of increasing and building human capacity, develop local expertise, establish local infrastructure, and increase indigenous participation in the oil industry. However, without access to resources and knowledge transferred to local companies, The Act may not realize its objectives and local capacity development may remain a pipe dream. Strategic alliances appear to be the most feasible and pragmatic approach through which local companies can develop capacity and through which foreign companies can comply with the regulation and expand their business. Unfortunately, whilst the industry remains attractive, many foreign companies with the required resources, expertise and knowledge are reluctant to expand into the market via long-term alliances due to several inherent challenges. Local companies who require access to resources and knowledge resident with foreign firms in order to develop capacity are usually ill-prepared and so not attractive as alliance partners. Where alliances do exist, they are predominantly loose with little or no commitment on both sides to develop local capacity.

This study examined how strategic alliances in the Nigerian oil industry can aid the actualisation of local capacity development initiatives, following the adoption of the Nigerian Oil and Gas Industry Content Development Act 2010. Existing literature was used to understand the various theoretical approaches and to identify gaps in literature with respect to alliances within the context of the Nigerian oil and gas industry or similar settings. The Resource-Based View and Knowledge-Based View were considered most relevant to the subject of capacity development through strategic alliances in the Nigerian oil and gas industry. The study examined the dominant alliance types in the Nigerian oil industry before and after regulation, together with motives behind such alliances and associated risks. It showed that clearly defined and favourable government policies, together with the enforcement of regulations and better preparation by local companies are paramount to the actualisation of effective long-term alliances and local content initiatives. The study revealed the need for a renewed focus on equity alliances, and for resource sharing and access, learning and knowledge transfer to be the central motives for local companies when seeking to form alliances with foreign firms to develop local capacity.

7.1 Contributions

The findings and proposed solutions from this study contribute to existing literature, to the researcher's own organisation (the focal company), the research participants (the target companies), industry regulator and policy makers as well as international and indigenous operators by illuminating grey areas on the subject and providing practical solutions to identified problems. The study shows the challenges in alliances formation in developing and less institutionalized settings, contrary to the context of clear and well-functioning institutional environments typically depicted in literature. Insights into the role that regulation and regulator can and should play in fostering a conducive environment for alliance formation and local capacity development via the effective monitoring and enforcement of appropriate policies (not previously emphasised in literature) were provided in this study. This study has also exposed the gap between the desired outcome of regulatory changes in the Nigerian oil and gas industry, and reality. Equity alliances were identified as the path to local capacity development, and a range of solutions to the identified bottlenecks to alliance formation and capacity building were put forward. In addition, solutions to the challenges with the quality of local companies' general inability to attract potential foreign partners were proffered. The study also identified the role of Corporate Political Activity (CPA) in effecting desired regulatory changes. The study's notable contributions to literature, practice and the industry are summarized below:

7.1.1 A Renewed Focus on Equity Alliances

The gap between the implementation of regulation and the actualization of local capacity development in the Nigerian oil and gas industry is wide. This study exposes that gap and identifies/provides insights into the root cause by showing that the lack of equity alliances is the overarching reason for the slow pace in capacity development in the Nigerian oil and gas industry. The study uses literature to develop an understanding of the various alliance classifications, determine which are prevalent in the Nigerian oil industry (pre-regulation and post-regulation), and provide an understanding of the type of strategic alliances that can deliver real local capacity development. This study has shown that alliances in the Nigerian oil and gas industry are rarely strategic due to their loose, short-term nature. Finally, the study contributes by providing insights into the major obstacles affecting equity alliance formation in a developing market (ten years after the regulation was signed into law in the case of the Nigerian oil and gas industry) and proposes solutions that can address or mitigate the challenges. In summary, this study has brought to light, the criticality of equity alliances to the successful implementation and actualization of local capacity development programmes, whilst identifying the bottlenecks and providing solutions to address.

7.1.2 ***The Role of the Regulator in Alliance Formation***

One of the unexpected but enlightening findings of this study is the significant role that regulations (and regulators) can play in facilitating alliances in some contexts. This is one of the gaps identified in literature. Whilst much has been written about alliances, and why/how alliances are formed, operated, and even evaluated, literature on the role of regulators in facilitating such alliances is hard to come by. And although a few things have been said at various forums in Nigeria about the regulations and the regulator in the Nigerian oil and gas industry, their role specifically in the alliance formation process is relatively untouched. This study addresses this gap by outlining the role that the regulator can play to facilitate equity alliances, with specific references to the Nigerian oil and gas industry. The study goes on to put forward recommendations and solutions that can enable the regulator to become a true facilitator of alliances in the industry, and thereby fostering an environment of trust and local capacity development.

7.1.3 ***The Quality of Local Companies***

The gap between where local companies in the Nigerian oil and gas industry are in terms of structure, ethics, corporate governance, management, succession, and compliance, and where they are required to be by potential international partners, is too wide. Whilst existing literature covers the alliance formation process and success criteria extensively, not much has been written on the specific role that local companies have to play in a developing market like Nigeria. This is of particular significance when seeking equity partnerships with international firms. If equity alliances are the route to local capacity development (as has been highlighted), then it is imperative that local companies gear themselves up to meet the minimum requirements expected by potential alliance partners. This study contributes by identifying the deficiencies of most local service companies in the Nigerian oil and gas industry, before recommending specific steps that may lead to local firms being more attractive and meeting minimum due diligence requirements on the path to a successful equity alliance that can yield the desired capacity development objectives.

7.1.4 The Importance of Corporate Political Activity in Alliance Formation

The ability to influence a policy decision in a manner favourable to a firm is said to be closely intertwined with improving firm performance. Outcomes of Corporate Political Activity (CPA) are measured in two ways: policy outcomes and firm performance outcomes (Hillman et al, 2004). Hillman and Hitt (1999) demonstrated that firms whose top management or directors are elected to federal office experience positive abnormal returns to shareholders. While some studies have drawn a direct relationship between CPA and performance, others have indicated that the importance of a political issue to a company is the number one factor that motivates it to become politically active (Vogel, 1996). Some others have argued that political strategies can be both complements and substitutes for market strategies and that effective implementation of either form of strategy necessitates integration with the other (Baron, 1995a).

CPA is also seen to take two forms. One is proactive (buffering) which involves proactive political actions on the part of a firm such as influencing legislative/regulatory processes or informing government decision makers about the impact of possible legislation (Blumentritt, 2003). It has been stated that firms with higher perceived or actual dependence on government policy are more likely to adopt an ongoing long-term relational approach to CPA (Hillman and Hitt, 1999) as against transactional approaches that are more ad-hoc and issue-specific. The other form of CPA is reactive (bridging) and includes such activities as tracking the development of legislation/regulation for a firm to have or exceed compliance levels when passed (Hillman et al, 2004). In addition, organizational slack has also been offered as an important driver of CPA (Schuler, 1996). Firms with very low levels of slack are said to be more politically active because political solution may be one of the only ways to rectify their financial woes.

In view of this, the ability of practitioners in the Nigerian oil and gas industry to influence the regulator in policy formation, as well as changes to existing policies could have a significant impact, not only on a firm’s outputs and results, but also on the overall objective of forming the right alliances and developing local capacity. Certainly, the importance of the desired changes (a form of political issue) should be a good enough motivator for firms in the Nigerian oil and gas industry to become more active in CPA. This study contributes to practice by illuminating the advantages that can be derived if more local companies become more proactive in the pursuit of CPA and how that can lead to the achievement of policies that can influence and foster the right alliances which can help in building capacity. This study has also contributed to literature by showing that CPA could be an important part of the alliance formation process in terms of influencing policies that can lead to an environment being more conducive to the formation of long-term alliances.

*7.1.5 **Applicability to other Settings and Industry***

Although this study has focused on the upstream service sector of the Nigerian oil and gas industry due to the author's interest, the presence of many local companies in the sector and the attention given the sector by the regulator (as enumerated earlier in Chapter 3), it also provides a firm basis for application to other sectors within the value chain of the Nigerian oil and gas industry. Such sectors can include upstream (exploration and production), midstream (refining, petrochemicals, liquefied natural gas, and liquefied petroleum gas) and downstream (retail and distribution of petroleum products). In addition, other settings involving alliances between foreign and local firms in a developing country such as power, manufacturing, agriculture and FMCG to name a few can benefit from this study. Finally, this study can apply to other countries similar to Nigeria, where the macro economy can benefit from carefully orchestrated and well-structured capacity development initiatives via long-term alliances.

These contributions and recommendations differ from and contribute to literature in specific ways. They bring to light a specific type of alliance (equity alliances) that can lead to capacity development within a specific context: the service sector of the Nigerian oil and gas industry. These contributions also shed light on the role that regulators and local companies need to play in the alliance formation process. They show that corporate political activity could be as important and as relevant not only in the strategic alliance formation process, but also in effecting the desired changes to current regulation. The study's key contributions are summarized in Figure 7.1.

Figure 7.1 - A summary of study contributions to theory and practice

Finally, translating the findings and solutions from this study into a white paper and framework for regulators and practitioners is a major contribution to practice, while paving the way for further research and applicability to other settings. It is the first of such in the Nigerian oil and gas industry and it is expected that a set of policy revisions will emerge. This in itself, is a form of proactive corporate political activity, which could have positive effect on practitioners, not least the author's own organisation. The proposed solutions go on to answer the research question: *"how can strategic alliances aid the development of local capacity in the Nigerian oil and gas industry"* by outlining practical steps for regulators and practitioners. This study has created new insights into strategic alliances within the Nigerian Oil and industry, which will aid the achievement of the overall objective of regulations to develop local capacity.

7.2 Research Limitations and Implications for Future Research

This research was limited to the focal company and the five target companies, all within the upstream service sector of the Nigerian oil and gas industry. In addition, the testing of the interventions and solutions was limited to the author's organisation (the focal company), post-research interviews with study participants (the target companies) and industry regulator. Nevertheless, these limitations have provided room for further research and application to other settings involving or that could benefit from alliances between foreign and local firms in a developing country. As indicated earlier, the lessons learned, and solutions put forward can be applied and/or form the basis for future research in other sectors within the oil and gas industry. The outcome of this study can also be extended to other industries that may wish to adopt alliances as a means of developing local capacity, as well as other oil producing countries in Africa. Future research can also focus on further testing the solutions and interventions put forward in this study.

The overall outcome of this research and its impact on the future of alliances and the development of local capacity not only in the Nigerian oil and gas industry, but other sectors, can therefore not be over emphasised.

APPENDIX I – ALLIANCE CLASSIFICATION

<table>
<tr><th>ALLIANCE CLASSIFICATION</th><th>LITERATURE PRESPECTIVE</th><th>THE NIGERIAN OIL & GAS INDUSTRY</th></tr>
<tr><td>Equity</td><td>Involves the transfer or creation of equity ownership.
Takes two forms: direct investment and joint ventures.
Direct investment occurs when one of the partners acquires partial ownership of the other partner or partners.
In joint ventures, partners invest in a new, jointly owned entity.
Preferred when the available chances and costs of opportunistic behaviour are high.</td><td>Prominent between the Nigerian government via the Nigerian National Petroleum Corporation (NNPC) and the International Oil Companies (IOCs).
Outright acquisitions extremely rare.
Limited actual joint ventures between foreign and local firms.
Almost non-existent between local firms.
Not prominent with many foreign companies still operating without any equity alliance with local companies.</td></tr>
<tr><td>Non-equity</td><td>Does not involve any equity transfer.
Includes all kinds of contractual arrangements.
Lacks a mechanism for curbing opportunistic behavior.
Relies heavily on the goodwill and voluntary cooperation from independent firms.
Much more flexible, with no transfer of equity, limited level of commitment and better control of risks relating to performance of the alliance.</td><td>Most common in the Nigerian oil industry. Portfolio of alliances exist with most local companies.
Loose arrangements are prominent in form of instruments like a Memorandum of Understanding/Agreement (MOU/MOA) and representation or agency agreements.
Typical between foreign companies/Original Equipment Manufacturers (OEMs) and local firms.
Project-specific alliances also exist purely for the bidding and execution of particular projects.
Still rare among local companies, meaning local companies hardly collaborate.</td></tr>
</table>

APPENDIX II – ALLIANCE FORMATION PROCESS

ALLIANCE FORMATION PROCESS	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
Selection	• Certain patterns of alliances tend to fail, among them alliances between competitor, between weak and strong firms and between weak firms. • Alliances of strong equals are more likely to succeed. • High levels of interim trust and complementarity of resources are essential conditions.	• Trust and integrity play a central role in the selection process. • Alliances of strong equals are rare. • The local company is usually the weaker of the two where a foreign firm is involved. • Recommendations tend to play a key role in partner selection (especially when a foreign company is looking to collaborate with a local one). • Scouting is very common for Nigerian companies looking for partners and this takes several forms: speculative approaches, conferences, exhibitions and other key industry events. • Most local companies are not well structured; this makes many unattractive to foreign players. • Demonstration of local market knowledge is crucial when foreign companies are evaluation local ones for partnerships. • Due Diligence is usually extensively done on the Nigerian company by the foreign entity. • The foreign company being on the approved vendors/manufacturers list of the prospective clients is considered important. Where such is not in place, the process of getting listed may be lengthy and cumbersome but doable. In many cases however, those already on the vendors list may already be in a binding partnership.

ALLIANCE FORMATION PROCESS	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
		• Products and services to be rendered have relevance and market viability. • Competitiveness of the partners are evaluated. • Objectives are reviewed for proper alignment. • Best-in-class technology is often a pre-requisite. • Industry "footprints" of both partners are key in the selection process. • Past performance of both partners are taken into account. • SWOT • Government policies play a significant role when foreign companies are selecting partners. In other words, a local company that is more able to help meet local regulations easily is more attractive.
Structuring	• Partner firms negotiate the structure of the alliance. • Can have various structures, ranging from joint ventures to equity and non-equity alliances. • Flexibility a key advantage for alliance formation and success.	• Limited number of joint ventures and a higher number of non-equity or loose arrangements. • For JVs, it is crucial for the Nigerian entity to have at least 51% stake in order to retain 'local company' status. This has implications in terms of concessions on tenders and projects. • Roles & responsibilities as well as organization and financing structures are clearly defined in JV situations; less so with loose arrangements. • Firm, legally binding agreements exist in almost all types of alliances with foreign partners but more flexible with loose alliances. The foreign partner seems to have the final say in such structures (principal/agent).

ALLIANCE FORMATION PROCESS	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
		• Project-specific alliances have even less structure and tend not to go beyond specific projects. • Loose arrangements which are most prominent are not seen as conducive for real capacity development. There is little commitment from either party beyond sales. • "Bogus" structures purporting local ownership are in place. Such have "agreements" implying an equity alliance, whereas in reality, it does not exist and is backed out by separate, parallel agreement.
Operation	• Partner firms work together to operate the alliance. • Sufficient cooperation is the foundation for a successful alliance. • Cooperation means that firms pursue common interests in the alliance, so that they restrain their self-interested activities that may harm their partners. • Firms will tend to exploit the alliance and their partners for their private interests in the absence of sufficient cooperation	• The alliances typically start off well, with initial cooperation between parties. • Commitment tends to wane over time due to short-term views, expectations not met or breach of terms and agreement, all of which outs the operation in jeopardy. • Opportunistic behaviours not uncommon among partner firms, especially the local ones. Other priorities get in the way. • There is a high failure rate even with loose alliances. • Close working relationship is seen in operations where alliances have worked. • Joint client visits are part of operating alliances. • Road shows and joint exhibitions at conferences and industry events are seen as integral to operating alliances.
Evaluation	• Controversial mainly because there is no generally	• Expectations are sometimes misaligned, mismanaged or not properly defined, making evaluation tricky.

ALLIANCE FORMATION PROCESS	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	accepted criteria for alliance performance evaluation. • Most practical approach is to separately examine the extent to which the alliance has served the objectives of each partner. • With a short-term orientation, alliance performance evaluation will rely heavily on financial and market-based indicators. • A short-term orientation may be valuable for an alliance, as alliances are often under pressure to deliver results in a rapid fashion and since tangible results are important to keep an alliance going. • If short-term performance is ignored, the alliance may lose its focus and fail to enlist sustained support of the partners. • When partners adopt a long-term orientation, they view the alliance as at least semi-permanent i.e., as an entity that will grow and adapt to the changing environment in the future. • With a long-term approach, partner firms will look more at the overall state of the alliance i.e., cooperation and morale rather than only financial and market aspects of the alliance.	• Where objectives were not usually clearly set, evaluation becomes difficult. • There is a tendency to evaluate purely based on short-term financial performance. • Short-term expectations mostly from local firms tend to cloud the alliance evaluation process. • Evaluation is generally not formalised. • Main indicators of performance tend to be business volumes and growth. • Regular reporting, meetings, teleconferences, and visits are key. • More structured evaluation process seen in equity alliances where a more long-term approach exists. • Evaluation of more binding alliances covers other parameters beyond short-term financial performances. These include training, knowledge transfer, technology transfer, relationships, and alignment. • A longer-term evaluation is seen as more suitable for a volatile market like Nigeria.

ALLIANCE FORMATION PROCESS	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	• Such a long-term orientation is particularly helpful when there is a high degree of uncertainty in the market.	

APPENDIX III – ALLIANCE MOTIVES

ALLIANCE MOTIVES	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
Risk Sharing	• Strategic alliances are seen as an attractive mechanism for hedging risk because neither partner bears the full risk and cost of the alliance activity. • Alliances of this type often provide for the management of the operation by one of the partners, while the other merely contributes capital and absorbs some of the risk failure.	• This appears to be more of a motive for JVs and equity alliances. The loose alliances tend to adopt a risk avoidance approach as against risk sharing. • Foreign companies perceive risk to be high, although the risk is sometimes exaggerated. • Local companies do not see this as a motive for alliance formation. • Alliances where one party only contributes capital are rare. Those are confined to fund raising partnerships such as private equity or banks.
Product Rationalisation & Economies of Scale	• Where production is characterised by economies of scale and learning by doing, firms may attempt to reduce costs by expanding output to achieve these benefits.	• Cost reduction was seen as more of a motive for equity joint ventures. Even so, this is confined to cost to be borne by each partner as against overall cost of the venture. Cost of doing business in Nigeria is generally seen as high. • Not a key motive for alliance formation in general and certainly not for the loose arrangements that are prominent in the industry.
Technology/ Knowledge Transfer/Capacity Building	• Alliances provide strategic benefits from the exploitation of synergies, technology, or other skills transfer. • An alliance must be more than a simple transfer of inter-firm technology. It must involve a longer-term relationship. • Significant innovations are likely to result from the fusing of complementary	• A primary largely post-regulation and most notable motive for most local companies. Not necessarily so for foreign companies with whom technology resides. • Training, access to technology and skills are critical. • Local capacity development becoming a clear motive for local companies, with the right alliances with foreign companies being the most pragmatic way to achieve this.

ALLIANCE MOTIVES	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	skills, a result which is unlikely to be achieved by one firm acting alone.	• Should be a motive for all but many local companies are comfortable being commission agents and so little interest is shown in longer term alliances aimed at capacity development and knowledge transfer. • A key driver for the regulatory body, the Nigerian Content Development & Monitoring Board (NCDMB).
Conforming to Government Policy	• One of the oldest rationales for strategic alliances has been building links with local companies to accommodate host government policy.	• A very prominent motive for foreign companies who were not so keen on alliances with local companies prior to new regulations. There is the perception that it is the only true motive for foreign companies. • It is perceived that foreign companies would still not be forming alliances with local ones if not compelled to do so by regulations to operate in the sector/country. • It is less of a motive for local companies who are already compliant with local content regulations. • There are many loose and 'bogus' arrangements and agreements solely to give the impression of compliance.
International Expansion	• Firms faced with foreign market entry have a wide array of entry modes to choose from. • Three distinct modes of entry into a foreign market: licensing or franchising, joint venture, or setting up a wholly owned subsidiary.	• A clear motive only for foreign companies in addition to compliance with local content regulations. • Prior to the enforcement of local content regulations, this was seen as the only motive for foreign companies who ventured into the Nigerian market. • Local knowledge is seen as resident with local companies and a key attraction to foreign firms who have expanded into the region.

ALLIANCE MOTIVES	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
		• There is a lot of licensing/representation agreements, with very limited JVs. There is also limited wholly foreign-owned subsidiaries and those in existence are have already fallen foul of local content regulations. • Franchising is non-existent.
Achieve or Sustain Competitive Advantage	• Alliances are particularly alluring to small businesses because they provide the tools businesses need to be competitive. • For many small companies, the only way they can stay competitive and even survive in today's technologically advanced, ever-changing business world is to form an alliance with another company or companies. • Only through allying can companies have the capabilities and resources necessary to win in the changing global marketplace. Self-reliance is an option few companies will be able to afford.	• A motive for local companies to be more competitive. Nevertheless, such alliances between local companies are short-term and on largely on a project-by-project basis. • This is recognized in the quest for knowledge and technology transfer. • A driving force behind local companies seeking to go into partnership with foreign companies with expertise and know-how geared towards capacity building, which ultimately leads to competitive advantage. This could come in the form of increased market share, a more robust product mix, human capital, and financing. • There is a notable absence of alliances between local entities to create competitive advantage. • Many local companies seem to still adopt the self-reliance approach.
Shaping Competition & Consolidating a Firm's Market Position	• Strategic alliances can influence who a firm competes with and the basis of competition. • Alliances can blunt the abilities of competing firms to retaliate by binding potential enemies to the firm as allies. • Alliances can defend current strategic positions	• Successful alliances have indeed shaped competition with allies setting the tone, pace and direction that the industry sometimes go and may even influence regulations. Where successful, such alliances have forced the regulator into action. • Local firms hardly come together and so combining resources to put pressure on a common competitor hardly occurs.

ALLIANCE MOTIVES	LITERATURE PRESPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	against forces that are too strong for one firm to withstand. • Strategic alliances may be used as an offensive strategy, for example by linking with a rival in order to put pressure on the profits and market share of a common competitor.	
Other motives		• These are motives not necessarily seen in literature. • Personal relationships: This refers to alliances borne out of nothing beyond having a deep personal relationship. • Payback: These are alliances formed for the sole purpose of repaying some sort of favour or commitment and are usually finance-driven.

APPENDIX IV – ALLIANCE RISK

ALLIANCE RISK	LITERATURE PERSPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
Components	• Failure rate can be as high as 50%. Success rate lower when compared with acquisitions and subsidiaries. • Risk is a significant factor in strategic management since strategic decision making is inevitably concerned with assessing odds for successful performance • Three components: Conceptual risk: the imperfect formulation of an issue or problem, such as using an incorrect model, making the wrong assumption about an issue, and choosing incorrect decision criteria. Administrative risk: the risk that even a well conceptualized issue or plan may not be implemented properly. Environmental risk: suggests that the environment can change in unanticipated ways even after well-conceived and well-implemented actions have been taken.	• All 3 risks in literature are prominent i.e. conceptual, administrative and environmental. • Nigeria is seen as a high-risk environment.
Types of Risks in Strategic Alliances	• Relational Risk: - Concerned with cooperative relationships, or the probability that the partner does not comply with the spirit of cooperation. - Opportunistic behaviour of the partners is a typical source of relational risk.	• Default/breach mostly from the local partner.

ALLIANCE RISK	LITERATURE PERSPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	- Arises from firm-firm interaction. - More prevalent in cooperative strategies. • Performance Risk: - Refers to the probability that intended strategic goals of an alliance may not be achieved, even though cooperation between the partners is satisfactory. - Arises from firm-environment interaction. - Prevalent in any kind of strategic choice. • Non-Alliance Risk: - Refers to the consequences of not going into an alliance. - Risk is not just bad things happening, but also good things not happening'	• Non-performance is seen as a key risk in a VUCA environment like Nigeria even with the best of intentions. The 'high-risk-high-reward' mindset is generally adopted by alliance partners. • Going it alone cannot build local capacity and so the risk of non-alliance is seen a real impediment to local capacity building.
Risk in Alliance Formation Process	• Mainstream economics, transaction cost, resource dependency.	• Misalignment and lack of understanding between parties at the onset. • Bad country reputation puts local companies in bad light and under immense pressure in the formation process. This is compounded by the number of local "portfolio" companies, making it difficult for foreign companies to truly differentiate between genuine and bogus entities. • There is a clear risk of well-intended local companies not finding the right partner due to country and market perceptions. The high-risk nature of the environment is not attractive to most potential foreign partners.
Risk in Selecting Alliance Partners	• Resource fit: means that partners' resources are somewhat related; they either complement or	• Misalignment in strategy, goals, values, and culture make strategic fit the most prominent. This may lead to wrong partner selection.

ALLIANCE RISK	LITERATURE PERSPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	supplement each other's resources. • Resources and capabilities of alliance partners are ultimately responsible for alliance performance. • Strategic fit: compatibility of strategic objectives. • Means that the firms know each other's real objectives in the alliance, and that these objectives can be accommodated in the alliance without harming the alliance or the partner firms.	• Partners' resources are hardly related. • Lack of understanding between parties. • Not enough due diligence done.
Risk in Structuring the Alliance	• Mainstream economics, Strategic positioning	• Lack of understanding of local regulations and structure not conforming to local regulations. • Lack of proper structure, with management roles and responsibilities clearly defined. • Lack of contractual/formal agreements. The loose nature of most partnerships poses a big risk. • Bogus structures purporting local ownership could run foul of regulators and jeopardise the alliance.
Risk in Operating the Alliance	• Firms will tend to exploit the alliance and their partners for their private interests in the absence of sufficient cooperation. • A certain level of competition in an alliance is essential since private interests are inevitable.	• Selfish interest is seen as a big risk and relates to opportunistic behaviours. Again, this is seen as more likely to be exhibited by the local companies. • Market uncertainties/volatility (e.g., oil price fluctuations) could make operating the alliance more difficult than anticipated.

ALLIANCE RISK	LITERATURE PERSPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	• Competition is open and legitimate and takes such forms as learning from partners, protecting own tacit knowledge and preventing an alliance from being a direct competitor in one's core business. • Opportunistic behaviour is self-interest with guile. Thus, the risk of operating in an alliance is that partners often over-emphasise either cooperation or competition. • Without adequate cooperation, alliances cannot be operated smoothly. Without sufficient attention to competition, alliances will unwittingly lose their competitive advantage and equitable rights and rewards. • Both competition and cooperation must be preserved in an alliance as dynamic and permanent conditions.	• Key man risk is seen as one that must be prevented since capacity building is largely driven by knowledge transfer. It is therefore important to keep key personnel within the alliance. • Personality clashes, sometimes resulting from cultural differences and language barriers can put operating the alliance successfully at risk. • Acquisition of partnering entity (typically the foreign) partner could lead to the alliance being dissolved by the acquiring party. • Insufficient funding (especially working capital) and/or inability of most local companies to contribute to funding is a big risk. • Diminished commitment from one or both partners has been observed as notable risk. • Changes to product and/or OEM specifications by client could put the alliance at risk. • Project delays, cancellations and lengthy tendering period can be a risk as this will lead to fewer projects to execute, with adverse effects on the alliance operation. • Insecurity in the country could put alliances in jeopardy, with many foreign partners opting to exit or terminate existing partnerships.
Risk in Evaluating the Alliance	• A partner may rely completely on either a short-term orientation or a long-term orientation. • Lack of patience regarding partners' own separate operation and performance. Partners expect results too soon.	• The proliferation of loose agreements makes short-term evaluation a risk. • Foreign partners expect quick results.

ALLIANCE RISK	LITERATURE PERSPECTIVE	THE NIGERIAN OIL & GAS INDUSTRY
	• With a short-term approach, alliance performance evaluation will rely heavily on financial and market-based indicators. • Integration of both short-term and long-term orientation.	
Other challenges and risks in alliance formation and operation specific to the Nigerian Oil & gas industry.		• Mutual distrust amongst local companies which may explain why alliances between local companies are rare. • Poor structure of most local companies makes them unattractive to potential foreign partners. • Ethical standards of most local companies not seen by potential foreign partners as being at the desired level. • Inability of most local firms to contribute funding to the alliance. • Communication gap. • Exploitation of local companies by foreign partners. The power structure tends to tilt towards the foreign party. • Culture/ego, perception of entitlement. • Value sometimes difficult to measure.

APPENDIX V – ALLIANCE SUCCESS CRIETRIA

ALLIANCE SUCCESS CRITERIA	LITERATURE PERSPECTIVE	THE NIGERIAN OIL& GAS INDUSTRY
Alliance risk management/Success Criteria	• Partner selection • Trust • Senior management commitment • Thorough planning • Shared goals and objectives • Clearly defined roles and responsibilities • Communication between partners • Regular feedback on performance	• Trust needs to be established at the very onset. • Integrity must be displayed and sustained throughout the partnership. • The right structures for the alliance, including legal frameworks must be established at the onset, including roles and responsibilities, management etc. • Due diligence should be given utmost priority to establish partners' strengths, credibility, and track record. This should also ascertain local company's local market knowledge and foreign party's technical and knowledge capabilities. • Compatibility and alignment must be established from the onset in terms of goals, objectives, cultural fit, and purpose. • Win-win, value creation approach and model must be evident. • Performance must meet or exceed expectation; partners must be able to see a sustainable business in the long-term. • Transparency and communication between parties must be seamless throughout the process. • Commitment should be sustained during the life of the alliance. • Corporate governance and ethical issues must be addressed. • Mutual respect is required from all parties, as is respect for the terms of the partnership agreement.

ALLIANCE SUCCESS CRITERIA	LITERATURE PERSPECTIVE	THE NIGERIAN OIL& GAS INDUSTRY
		• The alliance must be seen to be sustainable in the longer term. • Better/encouraging government policies and regulations. • Enabling environment, primarily from a security standpoint. • Better access to funding for local companies in order to strengthen their position in any alliance with foreign companies (currently very skewed). • Regulator to play a more prominent role in facilitating the right alliances. They can form a reliable source for foreign companies looking to enter the market and can organize sessions and forums specifically aimed at 'match-making'. • Common industry information management platform will help with quick access to crucial information as part of due diligence.

APPENDIX VI

INTERVIEW FORMAT (FOCAL COMPANY)

Date:

Company:

Business Unit:

Business Description:

Respondent:

Title:

Background of researcher: An oil & gas industry practitioner with nearly two decades in the oil service sector. CEO of a leading indigenous oil service company committed to the development of local capacity within the Nigerian oil industry.

Purpose of research: There is currently no published, researched work that specifically looks at alliances as a prerequisite to local capacity development in the Nigerian oil & gas industry. With partnerships being an integral part of the researcher's own organisation's strategy for growth and capacity building, the overall objective of this research is gain better insights into how strategic alliances can aid local capacity development in the Nigerian oil & gas industry. It is the intention of the researcher to produce a unique piece of work that will be useful for all industry 'actors' from indigenous to foreign, as well as policy makers and regulators.

Interviewee is seen to be key in gaining a deeper insight into the subject area (due to experience and track record in the industry) and research can help gain more from local content initiatives.

Format:

- Interview duration: 30 to 40 minutes
- Follow up emails/phone calls
- Privacy and confidentiality
- Informed consent (recording)
- Interview structure (a mixture of open and closed questions)

  - The first section will be about your understanding of the company's overall corporate strategy and a bit about the company's business and core services.
  - The second section will deal with your experience of alliances and partnerships within the organization. These will cover types of alliances, reasons for entering such alliances, associated risks and how you mitigated, and how such alliances were consummated, operated, and evaluated.
  - The final section will delve into local content issues. I will be looking at how alliances may (or may not) have aided local capacity development for the organization. I also will be exploring your understanding of the Nigerian Content Act (2010), the role of the regulatory body (NCDMB) and if the regulator is indeed an enabler for capacity development in the industry.

PART 1

I would like to commence with a few questions on the company in general.

1. Kindly state your name and role in Bell Oil & Gas
2. How would you describe the business in general?
3. What will you say are the core services?
4. Who are the main competitors?
5. What do you consider to be the company's competitive advantage?

6. Do you see the company as an indigenous organization?
7. What is the company's overall strategy and how do alliances play any role in that?

PART 2

Now I would like to talk to you about your experience of strategic alliances and how alliances were formed, operated, and evaluated in the organization.

1. What type of alliances has the company been involved in (equity or non-equity)?
2. Are the alliances single or portfolio alliances?
3. What were the primary reasons for entering into your specific type(s) of alliances?
4. What process did you follow in forming the partnerships?
5. How were your partners selected?
6. How was your alliance structured?
7. How did you operate and evaluate the alliance?
8. Can you describe your overall experience thus far?
9. Have your alliances achieved the objectives set out at the onset?
10. What would you ascribe the success or failure of your alliances to?
11. Bases on your experience, what do you consider to be the key success criteria for a successful alliance?
12. What were the risks involved in your alliances and how did you mitigate?
13. What were the main challenges you faced in the formation, execution, and evaluation of your alliances?
14. How would you describe your alliance overall (successful or not successful)?

PART 3

At this point, I would like to ask a few more questions to do with local content and local capacity building.

1. What is your understanding of the Nigerian Oil & Gas Industry Content Development (NOGICD) Act (2010) in general?
2. How do you assess the role of the regulator, the Nigerian Content Development & Monitoring Board (NCDMB) in achieving the stated objectives of the Act?
3. Can you describe your understanding of local capacity building and how is your organization building local capacity?
4. What role would you say alliances play in the company's ability to build local capacity?
5. What type of local capacity has your organisation been able to build (or plan to build)?
6. What are the main challenges you see in building local capacity?
7. How will alliances play a role in the company's future strategy to build local capacity?

APPENDIX VII

INTERVIEW FORMAT (TARGET COMPANY)

Date:

Company:

Business Unit:

Business Description:

Respondent:

Background of researcher: An oil & gas industry practitioner with nearly two decades in the oil service sector. CEO of a leading indigenous oil service company committed to the development of local capacity within the Nigerian oil industry.

Purpose of research: There is currently no published, researched work that specifically looks at alliances as a prerequisite to local capacity building in the Nigerian oil & gas industry. With partnerships being an integral part of the researcher's own organisation's strategy for growth and capacity building, the overall objective of this research is gain better insights into how strategic alliances can aid local capacity development in the Nigerian oil & gas industry. It is the intention of the researcher to produce a unique piece of work that will be useful for all industry 'actors' from indigenous to foreign, as well as policy makers and regulators.

Interviewee is seen to be key in gaining a deeper insight into the subject area (due to experience and track record in the industry) and research can help gain more from local content initiatives.

Format:

- Interview duration: 45-60 minutes
- Follow up emails/phone calls
- Privacy and confidentiality
- Informed consent (recording)
- Interview structure (a mixture of open and closed questions)

  - The first section will be a summary of your industry experience and your business (as appropriate).
  - The second section will deal with your experience of alliances and partnerships within your organization and/or the oil industry. These will cover types of alliances, reasons for entering such alliances, associated risks and how you mitigated, and how such alliances were consummated, operated and evaluated.
  - The final section will delve into local content issues. I will be looking at how alliances may (or may not) have aided local capacity development for your organization. I will also be exploring your understanding of the Nigerian Oil & Gas Industry Content Development (NOGICD) Act (2010), the role of the regulatory body (NCDMB) and if the regulator is indeed an enabler for capacity development in the industry.

PART 1

I would like to commence with a few questions on the company in general.

1. Kindly state your name, organization, and role.
2. Would you say your organization is an indigenous company?
3. How would you describe your experience in the oil & gas industry in general?
4. Do alliances play any role in your company's overall strategy and if so, how?

PART 2

Now I would like to talk to you about your experience on strategic alliances and how your alliances (if any) were formed, operated, and evaluated.

1. What type of alliances have you either been involved with or are aware of (e.g., equity or non-equity)? With foreign or local companies?
2. Do you have any experience of single or portfolio alliances?
3. What were the primary reasons for entering into your specific type(s) of alliances or what do you consider to be the primary reasons for alliance formation?
4. What process did you follow in forming the partnerships?
5. How were your alliance partners selected or how do you think partners should be selected?
6. What is your experience in structuring, operating, and evaluating alliances?
7. Would you describe your alliance experience as successful or failed?
8. Have the alliances you have been involved with achieved the objectives set out at the onset?
9. What do you consider to be the key success criteria for a successful alliance?
10. What were the risks involved in your alliances and how did you mitigate?
11. What were the main challenges you faced in the formation, execution, and evaluation of your alliances?

PART 3

At this point, I would like to ask a few more questions to do with local content and local capacity building.

1. What is your understanding of the Nigerian Oil & Gas Industry Content Development (NOGICD) Act (2010) in general?
2. How do you assess the role of the regulator, the Nigerian Content Development & Monitoring Board (NCDMB) in achieving the stated objectives of the Act?
3. Can you describe your understanding of local capacity building and would you say your organization is indeed building (or has built) local capacity?
4. What role would you say alliances play in a company's ability to build local capacity?
5. What type of local capacity has your organisation been able to build (or plan to build)?
6. What are the main challenges you see in building local capacity?
7. How will alliances play a role in your future strategy or industry to build local capacity?

APPENDIX VIII

INTERVIEW FORMAT (REGULATOR)

Date:

Company:

Business Unit:

Business Description:

Respondent:

Title:

Background of researcher: An oil & gas industry practitioner with nearly two decades in the oil service sector. CEO of a leading indigenous oil service company committed to the development of local capacity within the Nigerian oil industry.

Purpose of research: There is currently no published, researched work that specifically looks at alliances as a prerequisite to local capacity building in the Nigerian oil & gas industry. With partnerships being an integral part of the researcher's own organisation's strategy for growth and capacity building, the overall objective of this research is gain better insights into how strategic alliances can aid local capacity development in the Nigerian oil & gas industry. It is the intention of the researcher to produce a unique piece of work that will be useful for all industry 'actors' from indigenous to foreign, as well as policy makers and regulators.

Interviewee is seen to be key in gaining a deeper insight into the subject area (due to experience and track record in the industry) and research can help gain more from local content initiatives.

Format:

- Interview duration: 45-60 minutes
- Follow up emails/phone calls
- Privacy and confidentiality
- Informed consent (recording)
- Interview structure (a mixture of open and closed questions)

    - The first section will be a summary of your industry experience and your organisation.
    - The second section will deal with your experience of alliances and partnerships within the oil industry from a regulatory standpoint.
    - The final section will delve specifically into local content. I will be looking at how alliances may (or may not) have aided local capacity development within the oil & gas industry. I will also be exploring your role as the regulator and custodian of the Nigerian Oil & Gas Industry Content Development (NOGICD) Act (2010), its main purpose and the role of the regulatory body as an enabler for capacity development in the industry.

PART 1

I would like to commence with a few questions on your organisation in general.

1. How would you describe your organisation in general?
2. What will you say are the primary objectives of your organisation?
3. What is your overall purpose and strategy within the oil & gas industry?

PART 2

Now I would like to talk to you about your experience of strategic alliances in the industry

1. As a regulator, what is your organisation's role in strategic alliances in the industry in general?
2. What types of alliances do you consider dominant in the industry (e.g., equity, non-equity etc.)?
3. What main reasons for entering alliances do you come across?
4. How involved is your organization in supporting and ensuring successful alliances?
5. Can you describe your overall experience of alliances in the industry thus far?
6. What would you ascribe the success or failure of alliances to within the industry?
7. What risks do you see in alliances and how would you expect partners to mitigate?

PART 3

At this point, I would like to ask specific questions to do with local content and local capacity building.

1. As the custodian and regulator of all things local content, can you describe the main thrust of the Nigerian Oil & Gas Industry Content Development Act (NOGICD) Act (2010)?
2. How do you assess your organisation's role in achieving the stated objectives of the Act?
3. Can you describe your understanding of local capacity building and what industry players should focus on?
4. What role would you say alliances play in the quest to build local capacity?

5. What types of local capacity-development initiatives would you say your organisation has facilitated and driven?
6. How has your organization truly aided the development of local companies in the industry and how is this monitored?
7. How do you measure your organisation's contributions and accomplishments on local capacity building?
8. What are the main challenges you see in building local capacity and in enforcing/monitoring the regulation?
9. How will alliances play a role in your future strategy to build local capacity?
10. What is your overall assessment of your organisation's role and achievements since inception?

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