

## **Relevance of Local Contents to the Construction Industry**

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**BY**

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### **ABSTRACT**

*Nigeria's construction industry, which gulps over 80 percent of the capital budget of all tiers of government, had been dominated by expatriate companies since independence. This study therefore aims at finding out the extent of the relevance of local content in the construction industry in Akwa Ibom State. Four specific objectives and three null hypotheses were formulated to guide the study. Descriptive research design was adopted for the study with sample drawn from all the built industry professionals ranging from: surveyors to architects, planners as well as engineers (civil, electrical, structural and mechanical) in Akwa Ibom State. Questionnaires were used to elicit the responses of 125 respondents using simple random sampling technique. The data so collected was subjected to statistical analysis with the use of descriptive statistics and regression analysis to answer the research question and test the hypotheses at 0.05 alpha level. The result of the study showed that local contents have remarkable relevance in the construction industry. The results also showed that the extent of success in projects execution and completion significantly depends on local content involvement in the construction industry, pre-qualification conditions and application of sustainable business model. One of the recommendations was that government should endeavour to check the inconsistencies in the local content act, sincerely respecting the local content blueprint and follow it carefully, especially in the awards of contracts and other projects in the building industry.*

**KEYWORDS: Local Content, Construction Industry, Pre-Qualification Conditions, Sustainable Business Model**

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### **Introduction**

A country's prosperity is largely due to its ability to integrate the industry into the rest of its economy and a prudent management of its resources. Construction industry is regarded as the barometer for measuring the health of any economy. Many nations endowed with abundant resources have not achieved the expected levels of prosperity. Despite Nigeria's ever-growing profile and wealth, the country remains one of the poorest and technologically backward nations

in the world. Nigeria's construction industry, which gulps over 80 percent of the capital budget of all tiers of government, had been dominated by expatriate companies since independence. This is basically because the much-taunted wealth has not been translated into improved welfare. There has been an age-long impression that indigenous construction companies are incompetent, mismanage funds collected for projects and are unable to buy construction equipment required to execute most heavy construction and engineering projects. This notion had taken the country backward in terms of construction as a result, over 90 percent of the yearly industry expenditures escape the domestic economy as capital flight and over 70 percent of the contracts awarded to Nigerian companies are executed overseas, thereby defeating the primary objective of Nigerian content development which is to develop in-country capacity by executing contracts in Nigeria using Nigerian local resources (Adams et al., 2008; Nwosu et al., 2006).

The Nigerian government took a bold step in this direction when, through the Minister of works, announced in 2013 that all engineering and construction projects below N5bn would be handled by Nigerian contractors who possess the requisite capacity. "This was intended to reverse the domination of Nigerian engineering and construction industry by expatriates. A Presidential declaration was made to give jobs to local manufacturers and contractors even if their quotations are 10 to 15 per cent higher than those of expatriates," he also said that it could also be claimed that much of the country's poverty and underdevelopment can be attributed to mismanagement and the inability to achieve local content within the industry. On this note, in a recent study, it was noted that inclusion of local contractors attempts to give local stakeholders access to economic opportunities, whether they are related to employment, participation in supply chains or the provision of other related support services. Development of indigenous companies based on that nation's own natural resources is a significant vehicle for developing diversified economies, and in recent years, scholars, regulatory bodies and governments have conceptualized these ideas into the notion of "local content" (Nwosu et al., 2006). Local content focuses on the promotion of value addition in the host country to stimulate growth of the indigenous capacity. Achieving increased local content in each industry will integrate local companies into the industry and raise the mean standard of living of the population (Ihua et al., 2011;).

### **Statement of problem**

It has been noted that over 80 per cent of the capital budget of all tiers of government in Nigeria is expended in the construction and engineering industry. This situation had similarly been extended to Akwa Ibom which had recently been swept through by wind of massive construction projects of roads, bridges, and other structures, courtesy of the previous administration. But regrettably, in spite of the enormous opportunities that abound in the construction sector, the construction and engineering industry is still being dominated by foreign contractors thereby creating a huge capital flight as evidenced in Akwa Ibom State. This obviously should not be the case. No nation can develop solely by relying on the expertise of foreign nationals. Indigenous technology must therefore be developed, especially in construction and complex engineering projects as continued reliance on imported technologies and professionals to build most of Nigeria's infrastructure such as roads, power, energy, water supply and transportation is simply not sustainable in the long run. It is against this background that this study is carried out to find out the relevance of local content in the construction industry in Akwa Ibom State.

### **Objectives of the Study**

The main aim of the study is to find out the relevance of local contents in the construction industry in Akwa Ibom State. The specific objectives of the study seek to:

1. Find out the influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom state.
2. Find out the extent of the relevance of local contents in the construction industry in Akwa Ibom state.
3. Find out the influence of pre-qualification condition on the extent of success in project execution by the local contractors in Akwa Ibom state.
4. Find out the extent to which sustainable business model can contribute to local contents success in executing contracts in Akwa Ibom state.

### **Research Hypotheses**

The following research hypotheses were formulated to guide the researcher in the course of the study:

- HO<sub>1</sub>: There is no significant influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom state.
- HO<sub>2</sub>: There is no significant influence of pre-qualification condition on the extent of success in project execution by the local contractors in Akwa Ibom state.
- HO<sub>3</sub>: There is no significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom state.

### **Significance of the Study**

This study on the relevance of local contents in construction industry will be beneficial to students, the built industry professionals, the government and the entire public. To the students, the material will serve as a resource for research in the field of engineering and other fields; to the built industry professionals (which include: the planners, the surveyors, the civil, mechanic, and electrical engineers and the builders), the result from this study will create awareness and spur interest to rendering quality professional services so as to continue building indigenous construction companies. The government too shall benefit from this study as they shall realize the need to involve indigenous contractors in construction. Policies that help the local contractors to grow shall be put in place for such purposes.

### **Concept of Construction Industry**

The construction industry accounts for a sizeable proportion of world- wide economic activity. For example, in Europe it accounts for some 10 percent of gross domestic product (GDP) and in Australia it employs about 8 percent of the nation's workforce (Proverbs et al. 1999). Human resources represent the large majority of costs on most projects, and the industry employs an extremely diverse range of people from a wide range of occupational cultures and backgrounds, including people in unskilled, craft, managerial, professional and administrative positions (Green 2001). In recent years there has been a widespread realization that construction must improve its

human relation performance before it can improve its overall efficiency, productivity and cost effectiveness (Beardwell and Holden 2005). In the UK, for example, successive government-initiated reports have recommended action on improving the management of people as the cornerstone of increasing productivity thereby strengthening its business and management practices (Egan, 1998).

The construction industry is considered to be one of the most dynamic and complex industrial environments (Loosemore et al. 2003). It is a project based industry within which individual projects are usually built to client specifications (Loosemore et al. 2003). Fluctuations in the economic markets are reflected in considerable; variations in the number, size and type of projects undertaken by construction organizations over time. A key characteristic of the industry's output is that the finished product is largely non- transportable and must therefore be assembled at a point of use, usually outside (Bresnen, 2002). This requires construction organizations to set up temporary organizational structures at dispersed geographical location, frequently at a distance from central management. The changing requirements of construction work necessitate the formation of bespoke teams each time a new project is awarded. The impact of this is particularly apparent within the larger contractors, whose focus is on managing the construction process with a few directly employed managers and professional staff leading team of outsourced trades' contractors.

### **Some Common characteristics of Construction Industry**

Construction activity is extremely diverse, ranging from simple housing development to highly complex infrastructure projects (Belout, 2000). However, all types of construction project, regardless of size, have some common characteristics, which include the following:

- **Their unique nature:** unlike other sectors, where prototypes can be tested before real production gets underway, construction projects tend to be one-off, unique organizations that are designed and constructed to meet a particular client's product and service needs.
- **Their tendency to be awarded at short notice:** many construction projects are awarded following a period of competitive tendering, where the possibility for thorough planning is often limited. The resourcing function may need to respond to sudden changes in workload, as there can be no guarantee of how much work will be undertaken at any particular time (Hillebrandt and Canon 1990).
- **Their reliance on a transient workforce:** construction projects are, for the most part, constructed in situ. This necessitates the employment of a transient workforce which can move from one project location to the next. This transience poses many problems for workers, such as longer working days, more expense in travelling to work and managing work-life balance issues, since their families may not be as mobile.
- **Increasingly demanding clients:** in recent years there has been a steady increase in the quality of service and product expected by clients procuring construction work. Inevitably, this requires a considerable commitment from those working in the industry, which tends to manifest itself in unsafe working practices, long working hours and increased levels of stress (Respect for People 2000).
- **A male-dominated culture:** construction is one of the most male-dominated industries in virtually every developed society. This reliance on male employment leads to many challenges, such as skills shortages, difficulties in the management of equal opportunities and workforce diversity, and considerable challenges in terms of creating an accommodating atmosphere in which individuals' diverse skills and competencies are fully utilized (Dainty et al. 2000).

## **Concept of Local Content**

The issue of what constitutes local content in a workforce or supply chain is the subject of different interpretations. For instance, with regard to local procurement, the term is equated with locally owned, whereas at the other extreme, Local Content is sometimes used simply to describe any business that maintains a permanent operational office within a given area. Local content also has been defined in terms of the value contributed to the national economy through purchase of national goods and services (Warner, 2011). “Local value-added” is the wealth local companies create in transforming materials and services purchased from other countries into revenue-generating output. It is calculated as the value of the firm’s output minus the value of all foreign purchased inputs (including raw materials, energy, contractor services and rents).

## **Why Local Content Matters**

Local content matters to principals- not only for compliance, but because it is in a principal's long-term interests. In any country, local content contributes to a project's Social License-to-Operate (SLO). SLO is a concept that originated in the mining industry but is now used more broadly.

Achieving SLO means that communities around a project site are more likely to support the project. With the active participation of local SMEs they can expect to receive direct and positive benefit in the form of jobs, economic development and access to opportunities. They feel informed and involved. Not having a strong SLO can increase project risk or indeed cause it to fail entirely.

A stronger local economy will also help the principal's future operating business. A stronger local supply base means the business will depend less on imports and may be able to source locally at lower cost. Local content is also important for the project's host country or region. It can create broader economic and social benefits for the region and the country. Local procurement by resource projects may well be underrated as a source of economic development.

Creating opportunities: scaling down the work to fit.

Local contractors may take part of a large, complex scope of work, if they are operating in a management framework provided by either the principal or a managing contractor. This provides essential project functions such as planning and cost control, that are beyond the capability of a small contractor.

It is important to recognize that including local content adds cost and risk for a prime contractor. The principal should expect to adjust the contract risk allocation and compensation, to make including local content attractive to the prime.

## **Encouraging SMEs to scale up**

- SMEs can scale up to meet project requirements in a number of ways, such as collaboration, licensing, technology transfer and joint venture.
- SMEs that may be too small on their own can combine specialized expertise or pool resources to collectively deliver.

- Major international contractors can enter into joint ventures with local contractors.
- The principal can provide co-investment to develop local facilities if it is strategically important to build local long-term capability.
- As an alternative to joint venture, international firms can enter into licensing and technology transfer arrangements, where the local firm acts as a distributor, agent or licensed manufacturer for the international firm.

### **Inclusion of Local Contents in Construction Industry**

Although the policy of including local contents in the construction industry have come across many critics all over the world, many government acknowledge the local content policy to be an advantage in fostering growth and development within the shores of their countries. Critics such as; the policy inhibits benefited sectors from becoming more competitive vis a vis foreign suppliers; the consequent trend is then reduction of investment and innovation; costs associated with the acquisition of inputs increase; and resulting disincentive to further investments by foreign investors in the country, many of these government believe that the policy strengthening demand directed to the domestic market and employment expansion; diversification of the industrial sector; development of technology intensive sectors and high growth potential; build relevant segments to enhance national security.

Based on the directives of the NNPC, the Nigerian engineering and service company have invested hundreds of millions of dollars on skill acquisition and enhancement, and capacity expansion. Yet despite all these efforts, bottlenecks in the system still prevent meaningful building and engineering work being awarded to Nigerian firms. If these projects are awarded to the existing Nigerian yards, not only can they demonstrate their ability to deliver to international standards of quality and safety but they also can substantially build long-term industrial capacity, provide employment and global competitiveness which is currently in the hands of the overseas yards. Perhaps government's most outstanding effort so far is in the development of a unique blueprint for the successful implementation of Nigerian content policy in the oil and gas industry. This policy is referred to as the Nigerian Oil and Gas Development Law 2010. Technology transfer within the country should be well programmed and aggressively pursued if economic, military and political advantages are to be guaranteed. Nigeria, therefore, needs her own unique strategy of technological progress pursued with all seriousness if Nigerians are to make any meaningful impact soon. Another factor that made nonsense of past efforts at improving local content (and is still a challenge to current efforts) is the nation's inability to develop her infrastructure. These are all part of the fundamental challenge, which the government must address through its privatization programmes.

Government must remove the inconsistencies in the local content act, sincerely respecting the local content blueprint and follow it carefully, especially in the awarding of contracts and other projects in the building industry. Such a policy should ensure that the construction and engineering sectors and indeed the whole of the downstream sub-sector is commercialized and further opened to private sector participation. This will be best achieved if core investors are brought in to acquire majority shares in the industry and to take over their management.

Finally, the sincerity of government about the local content issue must be reflected in attractive fiscal policy or measures, all of which may gender a competitive spirit in our local construction company. Support for local content policies must be nation-wide. It must be accepted by all and should become embedded in every operator's business philosophy.

## **Challenges of Inclusion of Local Content in Construction Industry**

These challenges require construction companies to balance project requirements with competing organizational and individual employee expectations, priorities and needs. It is the industry's inability to manage these competing demands effectively which has caused many of the enduring problems which plague the industry today. Focusing on project and organizational requirements at the expense of human needs will result in employee dissatisfaction, reduced commitment, industrial conflict, increased turnover, more accidents, de-professionalization, recruiting problems and a continued poor public image.

People are individuals who bring their own perspectives, culture differences and values and attribute to organizational life, and when managed effectively, these human traits can bring considerable benefits to the organization (Mullins, 1999). Construction exists to contribute to the satisfaction of human needs and wants; people organized it, it employs people, it is the personal interactions which generate demands and determine the nature of supply responses. Collins and Smith, (2006) indicated that there are those practices which are referred to as calculative, hard or transaction based practice, which emphasizes tangible exchanges between the firm and the worker such as performance pay. On the other hand, Gooderham et al. (1999) indicated that there are those practices which are labeled as collabourative, soft or commitment-based such as worker strategy briefings. However, Collins and Smith's study is restricted to the role of the latter in relation to worker retention.

Given this challenge in environment, Armstrong (2004) maintains that few capable Indigenous Construction Firms (ICF's) have emerged despite the continuous challenges and infrastructural development of the nation and their involvement in construction practices. The Multinational Construction Firms (MCF's) appear bigger, most prominent and active participant in the Nigerian construction sector. The ICF's are still perceived less qualified and competent than the MCFs. For this reason, the ICF's are less patronized. This suggests that they are probably poor performers. Although there is growing empirical evidence showing that international firms perform better in almost all areas than their indigenous counterparts (Crowe et al., 2007) but not to the extent of being the dominant player.

This situation also reflects the opinion of Adebayo (2000) on the industry situation in other African countries like Kenya and South African. Though the Indigenous Construction Firms seemed to be as adaptable as their Multinational counterparts, they however showed inadequate involvement of their workers. The degree to which they empower and develop the capability of their workers is less than that of their foreign counterparts. The Indigenous Construction Firms are therefore at the much lower value-added end of construction activities in Nigeria than the Multinational Construction Firms which are at the high value-added end of the industry due to their competitive advantage. This situation also replicates itself in some other African countries. The lesson for other African countries from the situation in Nigeria is that without the development of appropriate practices and effective organizational ingredients for facilitating improvement of the Indigenous Construction Firms they will remain a net importer of construction services and will rely on foreign construction firms for most of their important construction projects.

## **Prequalification Criteria for Contractors' Selection in Construction Industry**

Prequalification could be used in early stages of the bidding process in order to select a group of potential contractors. The prequalification process could be used for various projects, goods, or services. The local content needs to undergo prequalification process base on the following concepts;

- **Client-Contractor Relationship:** Earlier interaction between the owner and the contractor plays a vital role in selecting a contractor as the owner prefers to work again with a contractor that has produced the earlier project at the required cost; time and quality benchmarks (APCC 1998). Plebankiewiez (2010) highlighted the benefits of prequalification to include: eliminate contractors who are not responsive, responsible and competent; encourage healthy competition among eligible contractors; reduce risk of contractor failure and improve client satisfaction; enhance contractor selection in term of achievement; and serves as an external auditing of the contractor's ability.
- **Financial Stability:** Financial stability makes appearance in almost every prequalifying team's list. This indicates the capacity of the contractor to fully meet financial commitments. Russell (1990b) indicated the importance of contractor's credit rating, banking arrangements and financial statement to measure the solvency (or liquidity), efficiency and profitability of a contractor, in assessing his financial capability. Lai, Liu and Wany (2007) considered financial stability for prequalification as the ratio analysis accounts, bank and credit reference and turnover history.
- **Contractor's Experience:** Contractor's experience entails past performance based on the type of projects completed in respect to location, nature, size, scope, local and national experience, to determine whether or not it has handled jobs of similar nature and scope. Also it demonstrates a contractor's ability to allocate and spread its resources in an effective manner (Ramani, 2000). Birrell (1985); Bubshalt and Al- Gobali (1996) affirmed that possessing experience in completing similar projects should be an important evaluation criterion.
- **Manpower Qualification and Management:** Studies have shown that stability of tenure of personnel matter most for proportion, but employees need a period of stability in a job to deliver of their best. In qualification of key personnel in the management of the project is viewed as being crucial to a successful project outcome, particularly the profitability of the contract (Holt et al., 1994a). It is an obligation of the management to adopt a formal training regime to pass on to employees for smooth management. APCC (1998) listed some of the needful a contractor should have as; skill formation, training policy and compliance with award prequalification and statutory obligation and so on, a few as evidence of a contractor performance and commitment to human resource management.
- **Safety and Health Record:** Accidents at construction sites may not only result in a loss of life but also result in increased insurance premium rates on the subsequent projects by the same contractor. It also results in a loss of goodwill. The selection of a contractor with a good safety record can minimize construction accidents and thereby save construction costs (Al-Gobali 1994).
- **Current Work Load (Capacity):** This criterion sometime known as 'current projects on hand' involves the evaluation of the contractor's manpower, equipment and financial

resources contributing to the ongoing projects to determine if its current commitment can influence his performance on the project which is being currently prequalified (Vela, 2000). Completion of current project show actual quality achieved for recommendation (APCC, 1998).

## **Development of Sustainable Business Model for the Participation of Local Content**

Over the years, mankind's development of a large industrial capacity and its ability to create new technologies that turn easier society's daily life has been a mark of innovation era. In many developing industries, technologies are incorporated into daily life by becoming indispensable to the modern lifestyle. In order to achieve life quality and be able to provide favorable environmental conditions to future generations, it is indispensable to become conscious about environmental effects of all mankind's production activities. Thus, some of such sustainable models developed for the participation of local construction industry include;

### **Principles of motion**

For any model to be functional and efficient it has to rely on a set of interdependent and harmonious elements, rules and procedures. In the proposal in focus, we list the main points and actions that should be considered:

- Clear and comprehensive legislation - the recent National Policy on Solid Waste culminating is a great motivator to take seriously the treatment of waste from the construction industry. But, it is necessary that the state and local public authorities commensurate with their organic laws that policy, clearly and objectively, and promote a public-private partnership, to put into practice the recycling of construction debris in their areas of coverage;
- Effective supervision - one of the major problems faced by municipalities is the illegal dump sites and on public roads, including transport companies themselves accredited. It is essential to pursuing a proactive surveillance for the balance of the process, using modern technology, such as control by GPS;
- Existence of incentives for products and services involved in the process is important, for example, that recycled materials are treated with different taxes in relation to new products;
- Existence of penalties for violating a law by service providers and generators of rubble - the penalties should be meaningful in order to promote greater accountability of individuals and companies in the process of disposal of construction waste, in favor of environmental control and panorama of cities.
- Encouraging the use of modern techniques and methodologies for building large projects in order to reduce the debris - debris is often generated by deficiencies in the construction process, such as failures or omissions in the preparation of projects and their implementation, poor quality of materials employees, for losses in transport and storage, improper handling by the workforce, as well as replacement components for the reform or reconstruction.
- The whole region should be provided with one or more treatment plants and waste processing, depending on the volume to be processed.
- Strategic location of collection points and disposal of debris (Ecopoints) for small and medium-sized generators of rubble.
- Area of Transshipment and Triage (ATT), which is the equivalent of an Eco Center for the receipt of large volumes of debris, from large generators.
- Location of areas of rubble landfill officials IC.
- Implementation of policies for environmental management and waste treatment in large generators, such as construction and demolition.

- Specialized transportation network.
- Educational campaign at all levels, including the population in general - is to clarify and encourage the integration of the self in the process.

### **Operational Architecture Model**

This model was generated for treatment of wastes from the construction industry, as well as the flow routing in each of the elements produced at each location. Due to the volume of debris generated, local construction industry is divided into; small/medium and large generators of debris.

#### **Small and medium generators of the debris**

According to the definition given in Resolution No. 307 of CONAMA, generators are individuals or entities responsible for activities or enterprises that produce construction waste. Constitute small and medium-sized generators, for example, construction projects and reforms implemented in commercial or residential units of small or medium size. The existence and management of eco-points are essential for efficient control of collection of debris from construction, to avoid dropping these, irregular, illegal or inappropriate points.

Eco-point sites are provided, usually by public authorities, waste disposal in a voluntary and free basis. They can be made simply by buckets, properly prepared by a land or a house, always located near point of generation potential, and easy access. If the construction or renovation generates a tremendous amount to be disposed of more than 200 liters, it will be needed to hire a company specialized in the collection services and transportation of debris. Small and medium generators are generally very impure, must be carefully separated, to be given the correct destination for each type of material found in them. Therefore, they should be compulsorily transferred to a triage area and Transshipment of Waste (TTA) for treatment.

#### **Large generators of the debris**

Large debris generators generate over 1m<sup>3</sup> of waste from construction or demolition. Usually, they are responsible for construction and remodeling of large, for example contractors, builders and technicians responsible for works. The big generators are responsible for disposal of rubbish they generate. In such cases it is necessary to hire a transport company of construction waste. In large enterprises, it is sometimes advantageous and desirable that the machining is done on the construction work. In this case, for crushing are generally used small equipment, with an average production of about 2m<sup>3</sup> per hour, with power and manual removal of the products. Equipment is simple and easy to use, where: mortar-mill, hammer mill, grinder or plaster jaw crusher. Besides improvements on the environment, the management of recycling at construction site brings good economic advantages, such as:

- Reducing the volume of rubbish sent to ATT or plant, reducing the cost of removal;
- More organized and clean site;
- Reduced acquisition of aggregate material;

It is therefore necessary that these models be implemented at construction industry in order to achieve life quality and be able to provide favorable environmental conditions to future generations.

## Research Methodology

Descriptive research design was adopted for the study. The population of this study comprised of all the built industry professionals ranging from: surveyors to architects, planners as well as engineers (civil, electrical, structural and mechanical) in Akwa Ibom State. A stratified random sampling technique was used to draw 125 respondents respectively. A structured questionnaire titled: "Questionnaire on Relevance of Local Contents to the Construction Industry (QRLCCI) which was developed in line with the research objectives was used to collect data from the respondents. The instrument so developed was made to pass through face and content validation by experts in the field. The reliability was tested using CRONBACH reliability test at 0.86 coefficient and this was high enough to justify the use of the instrument. The test for significance was done at 0.05 alpha level. The data collected were analyzed using simple regression and Chi-square analyses.

## Results and Discussions

### Results

#### Hypothesis One

The null hypothesis States that there is no significant influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom State. In order to test the hypothesis simple regression was used to analyse the data, (see table 1).

**TABLE 1: Simple regression of the influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom State**

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.88a	0.78	0.78	0.85	0.78

**\*Significant at 0.05 level; df =118; N =120; critical r-value = 0.197**

The table shows that the calculated R-value 0.88 was greater than the critical R-value of 0.197 at 0.05 alpha level with 118 degree of freedom. The R-square value of 0.78 predicts 78% of influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom State. This rate of percentage is highly positive and therefore means that there is significant influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom State.

#### Hypothesis Two

The null hypothesis States that there is no significant extent of the relevance of local contents in the construction industry in Akwa Ibom State. In order to test the hypothesis chi-square was used to analyse the data, (see table 2).

**Table 2: Chi-square analysis of the significant extent of the relevance of local contents in the construction industry in Akwa Ibom State.**

EXTENTS	Observe mean	Expected mean	X <sup>2</sup>
VHE	55	30	

HE	45	30	<b>55.27*</b>
LE	12	30	
VLE	8	30	
<b>Total</b>	<b>120</b>	<b>120</b>	

**\*Significant at 0.05 level; df = 3; N= 120; critical X<sup>2</sup>-value=7.82**

*VHE=Very high extent, HE=High extent, LE=Low extent, VLE=Very low extent*

Table 2 shows the calculated X<sup>2</sup>-value as (55.27). This value was tested for significance by comparing it with the critical X<sup>2</sup>-value (7.82) at 0.05 levels with 3 degree of freedom. The calculated X<sup>2</sup>-value (55.27) was greater than the critical X<sup>2</sup>-value (7.82). Hence, the result was significant. The result therefore means that there is significant extent of the relevance of local contents in the construction industry in Akwa Ibom State.

### Hypothesis Three

The null hypothesis States that there is no significant influence of pre-qualification condition on the extent of success in project execution by the local contractors in Akwa Ibom State. In order to test the hypothesis simple regression was used to analyse the data, (see table 3).

**TABLE 3: Simple regression of the significant influence of pre-qualification condition on the extent of success in project execution by the local contractors in Akwa Ibom State**

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.87a	0.76	0.76	0.89	0.76

**\*Significant at 0.05 level; df =118; N =120; critical r-value = 0.197**

The table shows that the calculated R-value 0.87 was greater than the critical R-value of 0.197 at 0.05 alpha level with 118 degree of freedom. The R-square value of 0.76 predicts 76% of influence of pre-qualification condition on the extent of success in project execution by the local contractors in Akwa Ibom State. This rate of percentage is highly positive and therefore means that there is significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State.

### Hypothesis Four

The null hypothesis States that there is no significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State. In order to test the hypothesis simple regression was used to analyse the data, (see table 4).

**TABLE 4: Simple regression of the significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State.**

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.88a	0.78	0.78	0.86	0.78

**\*Significant at 0.05 level; df =118; N =120; critical r-value = 0.197**

The table shows that the calculated R-value 0.88 was greater than the critical R-value of 0.197 at 0.05 alpha level with 118 degree of freedom. The R-square value of 0.78 predicts 78% of influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State. This rate of percentage is highly positive and therefore means that there is significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State.

### **Discussion of the Findings**

The result of the data analysis in table 1 was significant due to the fact that the obtained R-value (0.88) was greater than the critical-value at 0.05 level with 118 degree of freedom. The result implies that there is significant influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom State. The finding agrees with the opinion of experts, who asserted that although the policy of including local contents in the construction industry have come across many critics all over the world, many governments acknowledge the local content policy to be an advantage in fostering growth and development within the shores of their countries. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 2 was significant due to the fact that the calculated  $X^2$ -value (55.27) was greater than the critical  $X^2$ -value (7.82) at 0.05 levels with 3 degree of freedom. Hence, the result was significant. The result therefore means that there is significant extent of the relevance of local contents in the construction industry in Akwa Ibom State. The finding agrees with the opinion of Warner, (2011), who affirmed that Local content also has been defined in terms of the value contributed to the national economy through purchase of national goods and services. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 3 was significant due to the fact that the obtained R-value (0.89) was greater than their critical-value at 0.05 level with 118 degree of freedom. The result implies that there is significant influence of pre-qualification condition on the extent of success in project execution by the local contractors in Akwa Ibom State. The finding agrees with the opinion of Plebankiewiez (2010), who highlighted the benefits of prequalification to include: eliminate contractors who are not responsive, responsible and competent; encourage healthy competition among eligible contractors; reduce risk of contractor failure and improve client satisfaction; enhance contractor selection in term of achievement; and serves as an external auditing of the contractor's ability. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 4 was significant due to the fact that the obtained R-value (0.78) was greater than their critical-value at 0.05 level with 118 degree of freedom. The result implies that there is significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State. The finding agrees with the opinion of experts who aimed that mankind's development of a large industrial capacity and its ability to create new technologies that turn easier society's daily life has been a mark of innovation era. The

significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

### **Conclusion**

Based on the findings of this study, it was concluded that there is significant influence of local content involvement in construction industry on the extent of inclusivity of the project in Akwa Ibom State. Also there is significant extent of the relevance of local contents in the construction industry in Akwa Ibom State. It was also concluded that there is significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State. There is significant influence of sustainable business model on local contents success in executing contracts in Akwa Ibom State.

## **Recommendations**

Based on the conceptual review of the subject, it is important to submit the following recommendations:

1. Government should endeavour to remove the inconsistencies in the local content act, sincerely respecting the local content blueprint and follow it carefully, especially in the awarding of contracts and other projects in the building industry.
2. Policies put forward by the government or its agency should ensure that the construction and engineering sectors and indeed the whole of the downstream sub-sector is commercialized and further opened to private sector participation. This will be best achieved if core investors are brought in to acquire majority shares in the industry and to take over their management.
3. It is also necessary that models built to safeguard the image and interest of the industries be implemented at construction industry in order to achieve life quality and be able to provide favorable environmental conditions to future generations.
4. Inclusion of local content (indigenous construction companies) in the award of contracts should be observed in order to encourage talents development and local innovations.

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