

## Influence of Technical Skills on the Performance of Building Construction Enterprises in North Central Nigeria

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### Abstract

In order to enhance job creation, productivity and reduce the rate of unemployment, successive governments in Nigeria have made deliberate efforts in promoting the development and growth of small medium enterprise which are important in the overall economic growth of the Nation. In spite of efforts that have been put in place to promote the development of SMEs, the performance of building construction enterprises in Nigeria has appeared to be on the decline. The study was therefore aimed at investigating the influence of technical skills on the performance of building construction enterprises in north central Nigeria. The study identifies the key variables in the conceptual framework, while the methodology was based on the mixed research design that involves interviews with entrepreneurs of the selected contracting companies. The findings of this study can be inferred in several areas in Nigeria and indeed the whole of West Africa. It is expected that the result of the study will address performance issues of SMEs construction enterprises in Nigeria which would lead to the growth of Nigerian construction industry and other developing countries facing similar challenges.

**Keywords:** *Technical Skills, performance, Small Medium Enterprises, Construction Enterprises, Productivity, Unemployment*

### Background to the Study

The study explores the influence of technical skills on the performance of building construction enterprises in North central Nigeria. Empirical studies have drawn attention to the lack of skilled manpower in the sector, (Olatunji, 2010, Wahab and Lawal 2011, and Mbamali and Okotie 2012).

The performance of small medium enterprises (SMEs) is a major concern to governments globally. It is however of greater prominence in the developing economics as SMEs are regarded as a panacea to the poverty and unemployment problems. The development of small and medium Enterprises SMEs. in Nigeria dates back to early 1960s with establishment of Industrial Development Centers which were intended to assist and provide a solid foundation for industrial development (Aremu, 2004). There was a growing concern on low employment and the need for poverty alleviation measures.

The chain of programmes embarked upon by subsequent governments included the establishment of the people Bank, Community Banks, the Bank of Industry, the micro Finance Bank, the Nigerian Agricultural and Rural Development Bank, credit schemes, the National Poverty Eradication Programme and the small and medium industries Equity Investment Scheme (SMIES) (Aremu, 2004;) Aremu and Adeyemi, 2011; and Oni and Daniyan, 2012). Other policy measures initiated by government was the need for the strengthening of small and medium Enterprise Development Association of Nigeria (SMEDAN) which provides technical support to SMEs including business advisory and preparation of bankable feasibility study.

The Government also enforced a mandatory sub-contracting and partnership with locals by foreign construction companies and commenced pursuance of mandatory skills transfers of Nigerian by foreign construction companies (Oni and Daniya, 2012.) It is assumed that the prospect of generating more employment in the Nigerian Economy depends largely on addressing a range of sector issues, particularly in sectors that are labour intensive such as building construction industry. Unfortunately it has been observed that most SMEs in Nigeria and other developing countries go into premature extinction within their first five years of existence and that a smaller percentage goes into extinction between the sixth and tenth year.

Only about 5-20% of the young companies thrives and grows to maturity (Bassioni et al , 2004, X1a0 and Proverbs, 2002, and Ofori 2001). This dismal performance may be attributed to unfavourable fiscal policies of governments, which are deem as central to the private sector's performance and conserve either as an incentive or disincentive for growth.

### Statement of the Problem

The declining indices of building construction projects' performance have not received sufficient attention in many developing countries, even though a few scholars like Ofori (1991). Neely, Mills, Plats and Bourne (2002) and X1a0 and Proverbs (2003) have drawn attention to the need for improved performance within the industry. Nigerian

Construction enterprises are faced with Myraid problems ranging from lack of education, lack of experience work-force and innovation and unwillingness on the practitioner to improve on their performance. (Ewiwile and Orwa 2011).

These problems and many others have led to an unattractive domestic and international investment climate and it has been noted that prior to Nigeria's financial sector reforms in 2008, the industry had attained a double digit growth rate but this growth momentum appears to have been lost (Ede, 2010). While the industry contributes an average of 3.2% to the employment rate in other developing countries, it has remained at 1.0% over the past decade in Nigeria (Idrus and Sodaugi, 2007).

Current situation confronting the Nigerian construction sector demands for greater proactive and innovative improvements to achieve the desired performance. The future growth of the sector may be more dependent on the availability of entrepreneurs than is presently realized because entrepreneurs not only inspire and create new jobs but add competition to a dwindling economy as enterprises compete with newer ideas which promote more efficient business strategies (Zawdie and Langford 2000). The need to enhance construction SME performance in Nigeria has necessitated this study and it is considered relevant because several studies on the performance of the construction industry in Nigeria have tend to focused more on projects performance rather than on the entrepreneurial competences vital for driving the success of enterprises in an unstable economy.

Takim and Akintotel (2002) focused on performance indicators of projects in Nigeria while olatunji, (2010), Odusami (2003) focused on project delivery time, and the performance of professional in the construction industry, Ogwuelee (2011) and Ogunsemi and Jabboro (2006) focused on critical success factors influencing project performance and time-cost model for building projects in Nigeria respectively. This leaves a gap to be explored specifically on the influence of technical skills on the performance of SMEs building construction enterprises in Nigeria.

#### Objectives of the Study

The general objective of the study is to investigate the influence of technical skills on the performance of building, construction enterprises in North central Nigeria. The specific objective is to determine the influence of technical skills on the performance of building construction enterprises in North Central Nigeria.

#### Statement of Hypothesis

Ho: There is no significant relationship between technical skills and the performance of building construction enterprises in north Central Nigeria.

## Research Methodology

Research methodology has been defined as a way of systematically solve the research problem (Kothari 2011). Therefore the research method adopted in this study outlined the procedures and techniques employed in the study to fulfill the research aim and objectives on influence of technical skills on the performance of building construction enterprises in North Central Nigeria. This was achieved by carefully selecting the research design, area of study, methods and instruments of data collection, population size and sampling strategy. It also explains how the research was controlled and monitored to ensure the validity and reliability of the research data and the procedures associated with the data analysis methods and presentation of data.

## Test of Hypothesis

To test the hypothesis of the study that there is no significant relationship between technical skills and the performance of building construction SMEs in North Central Nigeria, a linear relationship between dependent and predictor variables involved were analyzed through regression analysis. The F-Test was used. This is to determine whether there is a relation between perceived performance variables of building construction enterprises and the technical skills variables. The fitted model in Table 1.0

Table 1.0: Model summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	0.983 <sup>a</sup>	0.966	0.920	0.692

From the table 1.0 the correlations between independent variables (Technical skills: Education, On the job training, Experience, Innovation) and the dependent variable (performance of building construction enterprise) is 0.983. This implies that there is a strong linear relationship between the independent variables and the performance of building construction enterprises in North central Nigeria, with the coefficient of determination R<sup>2</sup> being 0.966 indicate that 96.6%of the variation in the performance is explained by the independent variable. The result in table 1.0 above show that technical skill is highly and positively correlated with performance with R coefficient of 0.983 and R<sup>2</sup> value of 96.6%.

A Test of Significant on the fitted Model is Presented in table 1.1

Table 1.1: Analysis of Variance (ANOVA)<sup>a</sup>

Model	Sum of squares	df	Mean Square	F	Sig
1 Regression	40.564	4	10.141	21.185	0.015 <sup>b</sup>
Residual	1.436	3	0.479		
Total	42.000	7			

From the Table 1.1 the F calculated value 0.015 is less than the chosen CV value (0.05) the null hypothesis is not accepted and thus accept the alternate hypothesis. This shows that there is a statistically significant linear relationship between technical skills and the performance of building construction enterprises in North central Nigeria.

This findings are in line with Becker (1994) on human capital theory which differentiates between the specific (industry related skills) and the general human capitals and postulates that though education and training are costly, they should be considered as an investment since performance is enhanced when workers acquire both knowledge and skills. This was corroborated by Loose more et al, (2003) and crook et al (2011), that education and training aids developments of both financial and analytical skills that would translate the corporate mission of an enterprise into performance targets, in addition it helps enterprises align its goals and accurately measure performance progress. In another empirical research by Asta & Zaneta (2010, a very strong (correlation coefficient on 0.653) between technical skills and performance. Thus enterprises that make the most of their technical skills resources are better positioned to drive sustainable growth and profitability. The technical skills of building construction enterprises are therefore an important performance variable that determines the competitive success and profitability of enterprises.

Table 1.3: Coefficient of Variance

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95.0% Confidence Interval For B	
	B	Std. Error	Beta				Lower Bound	Upper Bound
<b>Model</b>								
1	(Constant)	0.973	2.754		-0.353	0.043	-9.739	7.792
	Education	0.001	0.001	-0.121	2.846	0.005	-0.005	0.003
	Training	0.002	0.001	-0.210	11.4398	0.000	-0.006	0.002
	Experience	0.005	0.002	-0.731	2.733	0.032	-0.001	0.010
	Innovation	0.000	0.001	-0.051	-0.257	0.144	-0.003	0.002

Dependent Variable: Performance of Building and Construction Enterprises

Finally, the researcher fit a general regression model to see the overall interactions. The fit is summarizing in Table 1.3

From the Table 1.3 it can be seen that the individual analysis, of the independent variable of (education, on the job training/deliberative practice, Experience and innovation). Out of these four items, three have been found significant, since their p-values are Education 0.005, On the job training 0.000, Experience 0.032 which is less than 0.05 level of significance at 95% confidence limits. This indicates that the sub-variables of the independent variable of technical skills positively influence the performance of building construction enterprises in North Central Nigeria.

However innovation's P-Value of 0.144 is greater than 0.05 level of significance at 95% confidence limits which implies that innovation does not have much impact on the performance of Building Construction Enterprises in North Central Nigeria. This might be the causes of most building failures in the region; this is supported by Aniekwu and Audu (2010). Oladapo, (2006); Muazu and Bustani, (2004); Oladimeji and Ojo, (2012) who asserted that poor performance by Nigerian indigenous contractor is as result of their poor workmanship poor mechanization lack of foresight and innovation.

#### Conclusion

In conclusion it means that if we increase technical skills by 1 unit, it will bring a change of 0.0015 on performance of building and construction enterprises in North Central Nigeria. Based on the empirical results presented in Table 1.3, the Null Hypothesis  $H_0$  is rejected and a conclusion reached that at 5% level of significance technical skills. Plays an important role in the performance of Building construction Enterprises in North Central Nigeria. It means that if we increase technical skills by one unit, it will bring a change of 0.015 on performance of building enterprises. This is shown by the regression analysis P value is 0.0 at 95% level of Significance that is less than 5%.

#### Recommendation

- i. Education is central to both individuals and societal development, therefore its being recommended that the building construction sector is one of the key areas in employment generation, young graduates should be encouraged to venture into the industry.
- ii. Since most of those who goes into construction industry lack the prerequisite knowledge of the industry, participants are to be encourage to include on the job training to their workforce.
- iii. Experience is very fundamental to the success and performance of building construction enterprises. It should be made a mandatory requirements for those who wants to go into construction enterprises.
- iv. Most practitioners in the industry often claimed to know much after few months of being on the job and this had led to many failed building projects in Nigeria. Key professionals in the industry should be encouraged to hold firm to the ethics of their profession and therefore reduce quackery.

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