

## ASSESSING THE EFFECTS OF PARTNERING ON ORGANIZATIONAL PRODUCTIVITY IN MANUFACTURING FIRM IN ADAMAWA STATE, NIGERIA

By

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### ABSTRACT

*This study was prompted by the desire to assess the effects of partnering on organizational productivity in manufacturing firms in Adamawa State, Nigeria. The objective is to; determine the effects of partnering on organization and goal setting, examine the relationship between partnering and performance feedback in manufacturing firms in Adamawa State, Nigeria. The population of the study was 515 staff of the selected manufacturing firms in Adamawa State, Nigeria. The sample size of 450 was obtained using Yamane (1963) formula, proportionate stratified sampling techniques was used to select the respondents in each of the manufacturing firms. Data were collected using questionnaire. It was found that partnering had a positive effect on organizational goal setting in selected manufacturing firms, in Adamawa State, Nigeria ( $r = 0.772$ ,  $P < 0.05$ ). Partnering had a significant positive relationship between partnering and performance feedback in manufacturing firms in Nigeria ( $r=0.906$ ,  $p < 0.05$ ). Based on the findings, the study concluded that partnering is indispensable for long time strategic relationship. Based on the conclusion the study recommends that management should continually and continuously design effective partnering, that achieve organizational productivity.*

**Keywords:** Partnering, organizational productivity.

## 1.0 INTRODUCTION

### 1.1 Background

The study focuses on formal partnering, where there is evidence of an explicit arrangement between the parties. This is not to dispute the existence and importance of informal partnering. The National Economic Development Office (NEDO, 1991), true partnering in the formal sense only became established in the mid-1980s, the first being that between shell and partners in 1984. The most frequently cited partnering arrangement of the 1980s is the Du pont/ fluor Daniel relationship for the cape fear plant project. The partnering arrangement between Du pont and fluor Daniel was made in 1986 and was a formalization of a relationship which had existed since the 1970s. Partnering is an umbrella term applied to a series of strategies that involve producing collaborations between different types of actors which extend beyond the sector based division between government, market and civil society. Projects are dynamic by nature and therefore, the use of fixed or predetermined agreements in the initial stages lead to problems such as, time delays, cost overruns, trivial claims and dissatisfaction of the parties (Rahman & Kumaraswamy, 2005). Confronted with these problems, firms are in a great need to practice the concept of partnering to enable them to determine their goals and to educate all parties of each other's goals and to mould them into common goals and mission. Lathan (1994) state that partnering has been increasingly used as a procurement method. Partnering enables the manufacturing organization to understand more clearly it customer's needs and objectives including improved efficiency and cost effectiveness increased innovation, opportunities and the continuous improvement of quality products and service.

Organizational productivity is a measure of how efficiency and effective managers use available resources to satisfy customers and achieve organizational goals. Heintz and Harold (2000) opined that efficiency is the achievement of the and with the least amount of resources. Efficiency is a measure of how well productive resources are used to achieve a goal. Organizations are efficient when managers minimize the amount of time needed to produce given output of goods and services. A manager's responsibility is to ensure that an organization and its managers performs as efficiently as possible all the activities needed to provide goods and services to customers. However, a rising number of manufacturing organizations are facing delay of payments, shrinking contracts as well as difficulty in getting loans due to tough operating environments in the manufacturing organizations. Additionally, some face insufficient financing, materials price escalation, like high skilled force, lack of performance and time management and lack of productivity. Confronted with these challenges, the manufacturing organization is in a great need to practice the concepts of partnering to enable them to determine their goals, educate all parties of each other goals and to more than into common goals and mission.

## 1.2 **Statement of the Problem**

In recent years, going into partnering has become more common and is today reflected in a range of policy areas. Contracting plays a dominant role mostly in large scale and complex projects. Despite developments taking place in the discipline of Project Management in general and contracting in particular, some projects are still falling. With the increase in complexity systems and processes, there is a growing need to bring together advances from different realms of constructing research. This trend is motivated by many reasons. Projects are more complex and tolerances tighter, constructors need to focus on multiple aspects of the construction process to achieve this required level of quality and response times are decreasing from design to project. It is no longer adequate for manufacturing firms to focus on particular aspects of their manufacturing process improvement. Rather, they need to use a holistic approach for process improvement.

## 1.3 **Objectives of the Study**

The broad objective is assessing the effects of partnering on organizational productivity in manufacturing organization in Adamawa State, Nigeria. The specific objectives of the study are to:

- i) determine the effect of partnering on goal setting in manufacturing firms.
- ii) examine the relationship between partnering and performance feedback in manufacturing firms.

## 2.0 **LITERATURE REVIEW**

### 2.1 **Conceptual Review**

#### 2.1.1 **Concept of Organization**

The environment around an organization or project influences the productivity of employees (Olusayo & Olubodun, 2018). For small, a clear relationship exists between firms' size and productivity. Various studies have shown that productivity level of small firms is below the average level, while the productivity of large firms is above average (Brick, Mursis & Fidell, 2019). The size of organization also determines the type of plant and equipment the firm can afford. The level of power and type of client also influence productivity (Uzee, 2019).

#### 2.1.2 **Concept of Productivity**

This is the volume of work a skilled worker can execute in a given period or amount of times in construction (Aniekum & Okpala, 2008). It is a measure for an organization. Productivity is mainly aimed at ensuring efficiency in an organization (Buba & Sani, 2017), it focuses on completion of task and not time spent to achieve the task through firm's expert that tasks are completed within the shortest possible time. This can be achieved when workers are given clear tasks and the necessary tools and information needed to complete the assigned tasks (Srez, Sarley & Hullin, 2017). Productivity of skilled workers is better achieved when project is broken down into individual tasks and assigned to workers based on their ability and expertise. This cycle continues till the project is completed (Rollers, 2005). Beyond reviews of performance, workers productivity is also important in pointing workers in the direction of how much they are doing to help their organization achieve their goals.

### 2.1.3 **Concept of Goal Setting**

This is a vital tool that attract motivation of workers (Ramous, 2001). Organizations aim to guide the conduct of its workers and motivate them for higher level of efficiency. Well defined goals are for stated and this ultimately leads to higher performance. Goal should be effectively communication is effective goals are clearer and easily understood (Ryan & Deci, 2018). Room should be made relevant feedback for the goals to achieved successfully. When this system is in place, higher efficiency is achieved, commitment is generated and workers achieve more (Pech & Slade, 2016).

*Performance Feedback:* This is a formal process where employees give information to workers and the workers area allowed to state their opinions and discrepancies are resolved (Smith & Johnson, 2018). The employees give instruction regarding feedback and requirements, the workers is also allowed to give a feedback and regarding the instrument. Role congruity where the worker's role and tasks are consistently allocated by his superior should be enforced (Srez, 2012).

## 2.2 **Open System Theory**

The historical roots of open systems theory lie with von Bertalanffy's (1956) founded general systems theory that describes dynamic, recurring patterns in biological systems. Open systems theory adapted this to the study of organizations, proposing that systems maintain themselves through contact with the environment. An open system is defined as a coalition of shifting interest groups, strongly influenced by environment factors that develops goals by negotiating its structure, activities, and outcomes. Open systems theory argues that organizations are social systems made up of a structuring of events or processes. Social systems are anchored in attitudes, beliefs, and motivations of humans, representing patterns of relationships characterized by variability in objectives that change over time and by control mechanisms to decrease variability of human behavior in the interest of stability (Katz and Khan 1978). The theory stresses complexity and variability of parts, looseness of connections, amorphous system boundaries, and attention to process, not structure (Scott, 1980). Properties of open system include: Inputs, transformation processes, and outputs (Katz and Khan, 1978).

Open systems theory describes organizations (the partnership) as social systems to transform resources from the environment into products or service for the environment (improved community health). An open system theory or model that describes a system as a set of interacting elements or sub-systems that make up an integrated whole, forming part of larger systems. Because open system theory deals with organizations in general and across all sectors, it is applicable to manufacturing firms and other organizations contributing to manufacturing firms. Open system theory provides a framework to study partnership as a social system with sub-systems that interact with each other and with the environment (Katz and Kahn, 1978).

### 2.3 **Empirical Review**

Kamaruzaman (2008) carried out a study on Risk Management Assessment for partnering Projects in the Malaysian Construction Industry. The study adopted a survey design and a sample size of 40 organizations. A questionnaire survey was conducted on the sample in order to examine the criticality of risk factors and to identify the effectiveness of risk mitigation measures applied in partnering. The opinions and techniques of risk mitigation were gathered through. The study found that the most critical construction partnering risk is the partner's financial resources, client's problems and economic conditions and financial problems among one of the partner. It is hope that the risk management programme will help to reduce the risks in the construction project in Malaysia. The study concluded that to minimize the chances of failure or underperformance of a partnering, risk management techniques must be introduced into the construction industry. The critical risk factors must be identified before making any meaningful partnering agreement. The critical risk factors can be systematically studied based on Internal, Project-specific and External risk groups.

Haminah et'al (2011), carried out an empirical study on partnering for small and medium contractors in Malaysia, employed a survey design using questionnaire as the technique. Copies of the survey design using questions were distributed to 250 classes of contractors in the state of Salangor, Malaysia. The author chose Salangor as the scope of the study, mainly because statistically, Salangor had the highest number of class of contractors in Malaysia. 40 copies were dully answered and returned. Though the sample size was relatively small and unable to represent the whole population. The study found that most of the class contactors had basic knowledge and understanding of the practice of partnering. Most of them believed that the concept of partnering was suitable to be applied due to the current problems in the manufacturing firms. It was also found that partnering can be used in review situations that demands productivity within a short given period, well-equipped plants and materials, enough capital and experience. Work productivity can be raised if the class contractors is fully committed to partnering.

### 3.0 **METHODOLOGY**

Survey research design was used for this study. Quantitative approach was adopted for the study. Structured questionnaire was adapted and administered to the staff of the manufacturing firms. The list of the manufacturing firms registered in Adamawa State was obtained from the Ministry of Commerce and Industry Yola, Adamawa State in August 2020. Yamane (1963) formula for sample size determination was used to arrive at a sample size of 450. The instrument used for data collection was questionnaire. The reliability of the instrument was confirmed using Cronbach Alpha formula and the result shows that all the factors were above 0.70 thus, confirming the reliability of the data. The data collected was analyzed using descriptive statistics to establish the mean and standard deviation of the identified factors which inferential statistics was adopted to establish the relationship between the partnering and organizational productivity.

#### 4.0 RESULT AND DISCUSSION

To determine the effects of partnering on goal setting in manufacturing organization. The hypotheses are hereby presented in the table below.

**Table 4.1**

Statement	SA	A	U	D	SA	Mean	Std
Partnering has a positive effect on goal setting in Adamawa State.	182 (35.3)	203 (39.4)	17 (3.3)	74 (14.4)	39 (7.6)	3.81	1.27

**Source:** Field Survey, 2020

The responses in the above table reveal that 182 (35.3%) respondents strongly agree that partnering has a positive effect on organizational productivity in the selected manufacturing firms in Adamawa State. 203 (39.4%) respondents were undecided, 74 (14.4%) respondents did not agree and 39 (7.6%) respondents strongly did not agree. With a mean response score of 3.81 + 1.27, the respondents are of the opinion that partnering has a positive effect on goals setting in manufacturing firms in Adamawa State.

In this study, partnering has a positive effect on organizational goal setting in manufacturing firms in Adamawa State, Nigeria. The data presented in table 4.1 was tested using the regression analysis, the result is presented below:

**Table 4.2:** Summarized Regression Results

Variable	Coefficient	t-value	p-value
Constant	5.206	45.904	0.000
Organizational productivity OP	0.806	21.471	0.000

$r = 0.772$ ;  $r^2 = 0.595$ ; Regss = 378.56; Regss = 257.330; t-value 754.682 sig.

**Source:** Field Survey, 2020

**Table 4.3:** Descriptive Statistics

	Mean	Standard Deviation	M
OP	2.2107	1.11227	515
Partnering	3.7175	1.06214	515

**Source:** Field Survey, 2020

**Table 4.4:** Correlations

	OP	Partnering
Pearson correlation OP	1.000	0.772
Partnering	0.772	1.000
OP		0.000
Significance level. (1-tailed)		
Partnering	0.000	
OP	515	515
N. partnering	515	515

**Source:** Field Survey, 2020

**Table 4.5:** Model Summary

Model	R	R <sup>2</sup> Square	Adjusted R square	Standard error of the estimate
1	.772 <sup>a</sup>	.895	.695	.70825

a. Predictor: (Constant) partnering

**Source:** Field Survey, 2020

**Table 4.6:** ANOVA<sup>a</sup>

Model	Sum of squares	DF	Mean square	F	Sig
Regress	378.561	1	378.561	754.682	0.000 <sup>b</sup>
Residual	257.330	5.3	.502		
Total	635.891	514			

a. Dependent variable OP

b. Predictor: (constant), partnering

**Source:** Field Survey, 2020

**Table 4.7:** Coefficients

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std Error	Beta		
1(constant)	5.206	.113		45.904	0.00
OP	.806	.029	.772	27.471	0 0.00 0

a. Dependent variable: OP

**Source:** Field Survey, 2020

The result of the regression analysis summarized in Table 4.2 shows that the model for the relationship between organizational productivity (OP) and partnering (P).

$$OP = 5.206 + 0.806P$$

This reveals that partnering have positive effect on organizational productivity in the selected manufacturing organizations. Furthermore, as t-value > 1.96 (t-critical) and P-value < 0.05, this effect is significant. The model fit is a predictive model that shows that without the influence of P, the value of OP will be 5.206. Also, the regression coefficient (r) of 0.772 indicate a strong relationship between the independent variable (organizational productivity) and the dependent variable (partnering).

The coefficient of determination ( $r^2$ ) of 0.595 reveals that 59.5% of the variation observed the dependent variable is caused by the independent variable. Having a regression sun of square of 378.561 > the residual sum of square of 257.330, this variation is not due to chance. The f-value and corresponding significance value of 754.682 (0.000) shows that these results are significant. The constant value of 5.206 shows that without he influences of P, the value of OP will be 5.206. Based on this, the results indicate partnering has a positive effect on organizational productivity in selected manufacturing organization in Adamawa State, Nigeria.

**The extent of the relationship between partnering and Performance Feedback in selected constructions firms in Adamawa State, Nigeria**

The perception of the respondents about the relationship between partnering and performance feedback in selected manufacturing firms in Adamawa State, Nigeria is presented in Table 4.8



**Table 4.8:** The Relationship between Partnering and Performance Feedback in Selected Construction Firms in Adamawa State, Nigeria

Statement	SA	A	U	D	SA	Mean	Std
Partnering has a significant positive relationship with performance feedback in the selected construction firms in Adamawa State.	122 (23.7)	198 (38.4)	83 (16.1)	72 (14.0)	40 (7.8)	3.56	1.21

**Source:** Field Survey, 2020

Table 4.8 reveal that 22 (23.7%) respondents strongly agreed that partnering has a significant positive relationship with growth in the selected construction firms in Adamawa State, 189 (38.4%) respondents agreed that partnering has a significant negative relationship with growth in the selected construction firms in Adamawa State, while 83 (16.1%) respondents were undecided. 72 (14%) respondents and 40 (7.8%) respondents disagreed and strongly disagreed that partnering has positive relationship with performance feedback in the selected construction firms in Adamawa State, Nigeria. From the mean of  $3.56 \pm 1.21$ , it is the view of the respondents that partnering has a significant positive relationship with growth in the selected construction firms in Adamawa State, Nigeria.

**Partnering has a significant positive relationship with organizational performance feedback in the selected manufacturing firms in Adamawa State, Nigeria**

In testing this hypothesis, the data presented in Table 4.9 was tested using the regression analysis. The results are presented below:

**Table 4.9:** Summarized Regression Results for Hypothesis Five

Variable	Coefficient	t-value	p-value
Constant	6.056	80.170	0.000
Organizational Growth (OG)	0.952	48.370	0.000

$r = 0.906$ ;  $r^2 = 0.820$ ; Regss = 606.464; Res = 132.974; F-value= 2339.670, sig. = 0.000

**Source:** Field Survey, 2020.

**Table 4.10:** Descriptive Statistics

	Mean	Standard Deviation	M
OG	2.5670	1.19942	515
Partnering	3.6641	1.14076	515

**Source:** Field Survey, 2020

**Table 4.11:** Correlations

		Organization Growth (OG)	Partnering (P)
Pearson correlation	OG	1.000	0.772
	P	0.906	1.000
	Partnering	.	0.000
Significance level. (1-tailed)	P	0.000	
	OG	515	515
	N. partnering	515	515

**Source:** Field Survey, 2020

**Table 4.12:** Model Summary

Model	R	R <sup>2</sup> Square	Adjusted R square	Standard error of the estimate
1	.906	.920	.820	.50913

a. Predictor: (Constant) partnering

**Source:** Field Survey, 2020

**Table 4.13:** ANOVA<sup>a</sup>

Model	Sum of squares	DF	Mean square	F	Sig
Regress	606.464	1	606.464	2339.670	0.000 <sup>b</sup>
Residual	132.974	513	.259		
Total	739.439	514			

c. Dependent variable OG

d. Predictor: (constant), P

**Source:** Field Survey, 2020

**Table 4.14:** Coefficients

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std Error	Beta		
1(constant)	6.056	.076		80.170	0.00
OG	.952	.020	.906	48.370	0
					0.00
					0

e. Dependent variable: OG

**Source:** Field Survey, 2020

The result of the regression analysis summarized in Table 4.17 shows that the model for the relationship between partnering (P) and organizational growth (OG):

$$P = 6.056 + 0.952OG$$

This reveals that partnering has positive impact on organizational growth in selected construction industry. Furthermore, as t-value > 1.96 (t-critical) and p-value < = 0.05, this impact is significant. The model fit is a predictive model that can predict the level of partnering given a particular level of organizational performance.

Also, the regression coefficient (r) of 0.906 indicates a strong relationship between the independent variable (partnering) and the dependent variable (organizational growth). The coefficient of determination ( $r^2$ ) of 0.802 reveals 82% of the variation observed the dependent variable is caused by the independent variable. Having a variation is not due to chance. The F-value and corresponding significance value of 2339.670 (0.000) shows that these results are significant. The constant value of 6.056 shows that without the influence of OG, the value of P will be 6.056.

Based on this, the results indicate that partnering has a significant positive relationship with organizational growth in the selected manufacturing firms in Adamawa State, Nigeria.

## 5.0 CONCLUSION

Every organization, especially manufacturing organizations, aim at ensuring survival and sustainability. The findings of this study revealed that partnering had a positive effect on organizational productivity in selected manufacturing organizations in Adamawa State, Nigeria.

This finding is in line with the findings of Haminah et al. (2011), who did a study on partnering for small and medium contractors in Malaysia, employed a survey design using questionnaire as the techniques. His study revealed that partnering can be used in review situations that demands productivity within a short period, well-equipped plants and materials, enough capital and experience. Work productivity can be raised if the class of manufacturers if fully committed to partnering.

## 6.0 RECOMMENDATION

Based on the finding of the study, it is recommended that management of manufacturing firms should continually and continuously design effective partnering that will achieve organizational productivity.

### 6.1 Limitation of the Study

The study is limited to manufacturing organizations in Adamawa State and this clearly shows that further study can be conducted in financial institutions, service organizations etc.

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