# **Enhancing Buyer/Supplier Collaboration and Organizational Performance in Construction Firms in Port Harcourt**

# Ogonu, Chituru Gibson

Department of Marketing, Faculty of Management Sciences Rivers State University gibson.ogonu@ust.edu.ng

#### Nwokah, Juliet-Gladson

Department of Marketing, Faculty of Management Sciences Rivers State University julietgladson24@gmail.com

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#### Abstract

This study examined the relationship between Enhancing Buyer/Supplier Collaboration and organizational performance of construction firms in Port Harcourt Metropolis. The study adopted the cross-sectional survey research design. Population of the study comprised of twenty two construction firms inPort Harcourt listed by (finelib.com/cities/Port as Harcourt/business/construction) metropolis. The entire population of the study was adopted as its sample size using census technique. 110 copies of structured questionnaire were distributed to five respondents in each of the 22 construction firms under investigation. However, 90 copies were retrieved and used for the analysis. The Pearson Moment Correlation Coefficient was used to test the hypotheses. The findings revealed that Enhancing Buyer/Supplier Collaboration significantly and positively related to organizational performance. It was also revealed that Enhancing Buyer/Supplier Collaboration correlated with reliability and organizational efficiency. The study therefore, concluded that Enhancing Buyer/Supplier Collaboration has positive influence on organizational performance of construction firms in Port Harcourt Metropolis. The study recommended that management of construction firms in Port Harcourt metropolis should adopt Enhancing Buyer/Supplier Collaboration to ensure efficiency in their procurement activities and actions of their organizations.

**Keyword:** Enhancing Buyer/Supplier Collaboration, Organizational Performance, Reliability, Organizational Efficiency

#### Introduction

The problems of organizational performance have been perceived during the last decades as an important element in managing organizations and evaluating process outcomes. Richard, Yip & Johnson (2009), opined that organizational performance encompasses three specific areas of firm outcomes, these are, product market performance (sales, market share); shareholder return (total shareholder return, economic value added) and financial performance (profits, return on assets, return on investment). Thus organizational performance comprises the actual output or results of an

organization as measured against its intended outputs (or goals and objectives). The biggest challenge to performance in most organizations is the external environment. The challenges that arise from the external environment include economic, environmental, political, technological and sociocultural (Snider & Rendon, 2008).

The primary goal of organizational performance is to increase organizational efficiency and effectiveness. Also organizational performance targets continuous improvement to improve organizational efficacy, which involves the process of setting organizational goals and objectives in a continuous cycle. At the organizational level, performance usually involves softer forms of measurement such as customer satisfaction surveys which are used to obtain qualitative information about performance from the viewpoint of customers while at individual and employee level organizational performance usually involves processes such as statistical quality control (Kaplan & Norton, 2001).

The rise of e-business in the late 1 990s led to the development of new opportunities related to procurement: spend management, e-procurement, and joint product design and outsourcing (Lancioni, Smith, & Oliva, 2000). The use of Information Communication Technologies (ICTs) has dramatically changed services, people's expectations and business models of the quality and efficiency of information sharing and service delivery (Brown, 2005).

Janda., (2002) argue that by treating suppliers as allies and sharing strategic information with them, firms can achieve better lead times and quality, increase operating flexibility, and establish long-term cost reductions, all of which could help these firms enhance value for the ultimate customer. According to Chin-Chun (2008), the benefits that result from collaborative relationships come in the form of a firm's ability to engage suppliers and other partners in mutually beneficial value exchanges.

Recently research in buyer supplier relationships has received increasing attention, especially as it has become widely known that various benefits can be enjoyed by developing closer relationships with suppliers. Buyer-supplier relationships have evolved towards a new form in order to respond to intensified competition. The movement towards closer cooperation between buyers and suppliers also results from the global and competitive market place that focuses on cost, quality, delivery, flexibility, and technology, which subsequently create a greater need to emphasize interfirm collaboration with various business partners (Mac Neil quality and efficiency of information sharing and service delivery (Brown, 2005).

However, not many studies have been devoted to understand the role of buyer-supplier collaboration in boosting organizational performance despite the increasing number of research papers. Theoretical research establishing the relationship between buyer-supplier collaboration and organizational performance among construction firms in Port Harcourt is still scarce. Hence this study aims at addressing this gap in knowledge as it explores the relationship between buyer-supplier collaboration and organizational performance of construction firms in Port Harcourt.

## **Purpose of the Study**

The purpose of this study was to examine the relationship between buyer-supplier collaboration

and organizational performance of construction firms in Port Harcourt metropolis. Specifically, the study sought to examine:

- 1. The extent of the relationship between Enhancing Buyer/Supplier Collaboration and reliability of construction firms in Port Harcourt metropolis.
- 2. The extent of the relationship between Enhancing Buyer/Supplier Collaboration and organizational efficiency of construction firms in Port Harcourt metropolis.

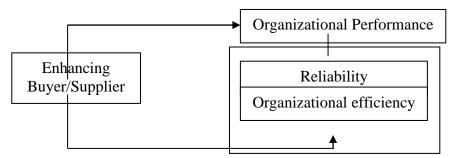
# **Research Hypothesis**

In view of the purpose of the study, the hypothesis is stated in the null form:

Ho<sub>1</sub>: There is no significant relationship between Enhancing Buyer/Supplier Collaboration and reliability of construction firms in Port Harcourt metropolis.

Ho<sub>2:</sub> There is no significant relationship between Enhancing Buyer/Supplier Collaboration and organizational efficiency of construction firms in Port Harcourt metropolis.

# **Conceptual Framework**



**Figure 1:** Conceptual Framework of the relationship between Enhancing Buyer-Supplier Collaboration and Organizational Performance of Construction Firms in Port Harcourt.

**Source**: Robbins S. P.,(2000) Managing today. Prentice Hall, 2000. 651 p. ISBN 0-13-011672-6. Kilibarda,M., Nikolicic,S. & Andrej ic,M. (201 6). Measurement of logistics service quality in freight for wardingcompanies: A case study of the Serbian market. *The International Journal of Logistics Management*, 27(3), 770-794.

#### **Theoretical Foundation**

Theoretically, the study is buttressed by the Transaction Cost Theory.

## **Transaction Cost Theory**

Transaction cost economics states that organization encounter the challenge of opportunism when they are in a situation bargaining with a small number of other organization. Hence then having more suppliers reduces this risk and affords the organization the ability to negotiate better procurement deals as the buyer is less dependent on any particular supplier (Dedrick, Xin and Xiaogu, 2008). Dedrick et al.(2008) states that the number of suppliers chosen by an organization encompasses an optimal balance among the following key transaction factors: fit, coordination costs and risk opportunism.

Information technology has the potential of reducing coordination costs as procurement processes are standardized and automated, thus reducing the cost of working with more suppliers. This

mostly benefits the buying organization especially for commodity items such as copper pipes. Information technology allows organization to reduce the number of suppliers and focus on low cost suppliers of standard goods and consolidated their purchases to obtain volume discounts (Dedrick et al., 2008). The use of information technology (IT) facilitates the reduction of coordination costs. For example, electronic market places, facilitated through IT, reduce the cost of searching and obtaining information about product prices and offerings (Bakker, Zheng, Knight and Harland 2008).

Collaboration facilitates information sharing by lowering transaction costs as companies can reduce supply chain uncertainty and thus the cost of contracting. For example if a supplier is unable to accurately predict the price of its product inputs, it will be reluctant to enter into a contract, which locks it into a fixed price for an extended period of time (Arrowsmith, 2002). Finally, technology uncertainty refers to the fuzziness in the selection of a suitable technology platform (Koufteros, 1999). An example is the trade-off between a fool-proof manufacturing technology (perhaps dated), compared to a prospective technology offering better price to performance but whose viability is uncertain (Klein, 2007). Furthermore, uncertainty can also arise from social uncertainties (such as strikes), natural (such as fire, earthquake), and political (such as fuel crisis) (Johnston, 2005).

Similarly, (Sulek, Marucheck and Lind 2006) classified uncertainty as primary, supplier and competitive uncertainty. Primary uncertainty is consistent with Wendin, C. (2001) and refers to the lack of knowledge of states of nature (Sulek el al, 2006). Competitive uncertainty arises from the strategic actions of potential, actual competitors or innocent actions (McManus, 2002). Supplier uncertainty is basically behavioral uncertainty and refers to possible opportunism by upstream or downstream partners. In organizational theory uncertainty refers to environmental uncertainty (Trent, 2007) and includes a number of factors such as uncertainty regarding suppliers and competitors actions, as well as uncertainty in technology and regulations, which captures both primary and secondary uncertainty.

The presence of demand uncertainty and the, lack of information sharing in the supply chain lead to problem known as the bullwhip effect: which is the amplification of demand variability as orders move up the supply chain (Featherman & Pavlov, 2003). Johnson & Whang (2002), provides evidence for this finding from the food industry, whereas (Nagle, FinneganandHayes 2006) reports on the bullwhip effect in the automotive sector. The bullwhip effect can be alleviated through sharing demand information in the supply chain, which reduces information uncertainty and asymmetry (Lee, Sheldon and Turban 2003). Therefore, limiting uncertainty through information sharing reduces companies' internal risk as companies optimize capacity planning, production and inventory. Although, information sharing seems to bring with it many benefits, it can simultaneously increase transaction risk, as higher levels of business transparency leads to opportunistic behavior. Nevertheless, uncertainty as a factor might affect companies' initiatives to share information. This also agrees with contingency theory, which states that the rate of change in an environment and amount of uncertainty affects the development of internal features in organizations.

# The Concept of Buyer-Supplier Collaboration

Collaboration has been defined as "two or more chain members working together to create a competitive advantage through sharing information, making joint decisions, and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone" (Togar and Sridharan, 2002). This provides internet based technology that enables teams to collaborate in the management of documentation by supporting contract and project management both before and after contract award within a shared and secure working environment.

The collaborative management of key buyer and supplier collaboration is an important aspect to logistics management and physical distribution. Hjelmborg, Jakobsen and Poulsen (2006), for instance, argued that closer buyer-supplier relationships have evolved over the past two decades from transaction processes based on arm's length agreements to collaborative processes based on information sharing and trust and that collaborative buyer and supplier relationships play an important role in an organization's ability to respond to unpredictable and dynamic change. According to (Davenport, 2008), buyer-supplier commitment is an enduring desire to maintain a valued relationship. (Hsu & Chiu, 2004) proposed that the expectation of relationship is important for motivating collaboration in inter-organizational relationships. It was noted that incentive alignment, joint decision making and information sharing are factors that facilitate collaborative action through information exchange between the buyer and supplier.

## **Organizational Performance**

Performance refers to either the 'ends' (results) or the 'means' (actions) that gave birth to the ends (Abdifatah, 2012). Mwingi (2012) views performance as that which includes inputs, outputs, intermediate outcomes, end outcomes, net impacts and unintended outcomes. Danese and Romano (2011) described performance as a word that indicates an economy, industry or company's ability to achieve certain results comparable, on the basis of certain given criteria with the results of other units which are expressible in positive terms. The Dictionary meaning of the term 'performance' implies an act of performing; of doing something using Knowledge as distinct from merely possessing it and any recognized achievement.

The performance is "A set of metrics used to quantify the efficiency and effectiveness of supply chain processes and relationships, spanning multiple organizational functions and multiple firms and enabling supply chain orchestration". The aim of every organization is to enhance the performance but for improvement they must need to measure it accurately first. Previously performance was measured by cost with the passage of time more financial indicator were added like return on asset, return on investment, sale and etc (Anand & Grover, 2015). Only financial indicators are not enough for measure overall and accurate performance, consequently, with invent of balances core card approach some operational indicators were added. Other approaches also added values in measuring supply chain like quantitative or qualitative measures, strategic, tactical and operational measures and etc.

Roistadas (1998) believes that the performance of an organizational system is a complex relationship involving seven performance criteria that must be followed: effectiveness, efficiency, quality, productivity, quality of work, innovation and profitability. Performance is closely related to the achievement of the criteria listed above, which can be regarded as performance objectives.

Philippe Lorrino (1997) states that: "Performance in the enterprise is what contributes to improving cost-value couple and not just what helps to reduce the cost or increase the value". The first stage of the "translation" of the cost value couple in concrete "pilotable" elements is to describe in global terms how the enterprise creates and will create value. It is, therefore, about defining "value" in the view of future developments. To design the value of tomorrow is to define a strategy. The first stage is therefore to translate the cost-value couple in strategic objectives.

The above definition of performance can be translated into another equivalent definition:

"Performance in the enterprise represents all that contributes to the achievement of strategic objectives". For the enterprise, performance is only what improves the cost-value couple, which is what contributes to value creation. A company is efficient if it has the ability to create economic value added, that is, a positive value after the remuneration of all factors, including equity.

Bates and Holton (1995) define the concept of performance as "a multidimensional abstract concept whose measurement depends on a variety of factors". Performance may refer to both enterprise "organizational performance and an activity / a department / a manager / a performer. The authors say it is important to determine whether the measurement objective is to assess the effects of performance or the performing behaviour. The drawback of this definition is that it does not contain a rating that would have a downwards applicability. The general definition given by Bates and Holton to performance underlines its ambiguous nature, whose measurement depends on a variety of factors.

Annick Bourguignon (1997) fails to define the concept of performance in one way and therefore identifies three main senses of the word performance: (i) Performance is success. Performance does not exist in itself. It varies by representations of the "success" of businesses or actors.

(ii) Performance is the result of action. This meaning contains only value. Performance measurement is understood as an assessment of achieved outcomes, in the course of a process, an activity. (iii) - Performance is action. In this regard, performance is a process, and not a result that occurs at a particular time.

Performance is achieving organizational objectives, according to Annick Bourguignon's definition. This definition is applied in all fields of management (management control, general politics, human resources management). Performer is the one that reaches its objectives. Thus, performance depends on the objective/purpose. Performance is multidimensional when goals are manifold; performance is a subset of action; performance is subjective because it is the product of operation, which, by its subjective nature, consists of approaching a reality to a desire.

## **Measures of Organizational Performance**

Birech (2011) outlines various performance measures as within operations area namely (i) standard individual performance measures include: productivity measures, quality measures, inventory measures, lead-time measures, preventive maintenance, performance to schedule, and utilization. (ii) Specific measures include: Cost of quality - measured as budgeted versus actual, variances - measured as standard absorbed cost versus actual expenses, period expenses - measured as budgeted versus actual expenses, safety - measured on some common scale such as number of hours without an accident, profit contribution measured in dollars or some common scale. In this study, organizational performance is expressed as: customer's satisfaction, competitive advantage,

cost effectiveness, operational efficiency, customer service delivery, and productivity. Organizational performance includes quality performance, customer service, delivery performance and cost performance. Effendi (2015)has use logistic effect for SCM and its metric consisted on order fill rate, order fulfillment lead-time, operations flexibility, inventory turnover and total logistics cost. Sequel to prior studies, we adopt reliability and organizational efficiency to measure firm's organizational performance.

## **Organizational Efficiency**

Efficiency is the ability to avoid wasting materials, energy, efforts, money and time in doing something or in producing a desired result. In a more general sense, it is the ability to do things well, successfully, without waste, in more mathematical or scientific terms, it is a measure of the extent to which input is well for an intended task or function (output). It often especially comprises the capability of a specific application of effort to produce a specific outcome with a minimum amount or quantity of waste expense or unnecessary effort. Efficiency is a measurable concept, quantitatively determined by the ratio of useful output to total input. Efficiency measures relationship between inputs and outputs or how successfully the inputs have been transformed into outputs. To maximize the output Porter's Total Productive Maintenance system suggests the elimination of six losses, which are: (1) reduced yield — from start up to stable production; (2) process defects; (3) reduced speed; (4) idling and minor stoppages; (5) set-up and adjustment; and (6) equipment failure. The fewer the inputs used to generate outputs, the greater the efficiency.

According to Pinprayong and Siengthai (2012) there is a difference between business efficiency and organizational efficiency. Business efficiency reveals the performance of input and output ratio, while organizational efficiency reflects the improvement of internal processes of the organization, such as organizational structure, culture and community. Excellent organizational efficiency could improve entities perfon-nance in terms of management, productivity, quality and profitability.

According to Storto and Gonciaruk (2017), efficiency means the ability of an organization to derive maximum output from a minimum input of a given quantity of resources. Organizational efficiency is the ability to avoid wasting materials, energy, efforts, money and time in doing something or in producing a desired result (Madanhire & Mbohwa, 2016; Richardo & Wade, 2001). In a more general sense, it is the ability to do things well, successfully, without waste. Lee and Johnson (2013) assets that organizational efficiency is ability of an organization to reduce waste in time, effort and materials as much as possible, while still producing a high-quality service or product.

According to Madanhire and Mbohwa (2016) posit that operational efficiency is more concerned about producing at the same level with fewer resources. Barlan-Espino (2017) posits that operational efficiency is primarily a metric that measures the efficiency of profit. The greater the operational efficiency, the more profitable a firm or investments is. This is because the entity is able to generate greater income or returns for the same or lower cost than an alternative.

#### Reliability

Reliability is most important factor which is related to handling service problems of customers,

performing services at the right time such as delivering services at the promised time and keeping error free records of each activity (Van-Winkelen & Mckenzie, 2011). Furthermore, reliability is all about accurate order fulfillment as accurate quote, accurate record, accurate in billing, and maintain service promise (Parasuraman, Zeithami and Berry 1993). Reliability is the ability to perform the promised service dependably and accurately. It means the ability of a service provider to provide the committed services truthfully and consistently (Blery, 2009). Customers want trustable services on which they can rely.

The reliability dimension of service quality refers to the ability of service organizations to perform the promised service dependably and accurately, and thus reflects the consistency and dependability of an organization's performance. (Wilson, Zeithami, Bitner & Gremler, 2008) state that reliability means that the organization delivers on its promises about service delivery, service provision and problem resolution. Even though unreliable service providers are extremely frustrating for customers, a disturbing number of organizations still fail to keep their promises regarding service delivery. In many instances, the customer is ready to spend money if only the service provider will show up and conduct the transaction as promised Bateson & Hoffman (2011). Reliability is consistently the most important determinant of perceptions of service quality. Reliability is to provide promised, dependable, accurate and consistent services to the customers. However, reliability depends on handling customer service issues, performs the services right the first time; offers services on time, and maintain a record of error-free (Khan and Fasih, 2014). (Parasuraman et al., 1993) defined reliability as the most significant factor in conventional service. (Khan and Fasih, 2014) stated reliability as to provide precise and constant benefit or service to the customers. Prompt supply of services to customer, eagerness of personnel to supply services to customer and to assist him, personnel have sufficient time for the clients and to give promises to customers for the time of services. Reliable service performance is a customer expectation and means that the service is accomplished on time, every time, in the same manner, and without errors.

## **Empirical Review**

There is scarcity of empirical literature on the impact of buyer-supplier collaboration on organizational performance. However, few literature obtained in the subject matter indicate that Enhancing Buyer/Supplier Collaboration is very important in realizing organization's objectives. In this regard Yan and Dooley(20 17) explored buyer-supplier collaboration quality in new product development projects. The study use resource dependence theory to formulate inter-firm and project-level antecedents of buyer—supplier collaboration quality and argue how it affects new product development project outcomes. Data from an empirical survey of 214 buying organizations validate the measurement structure of the new construct and support its positive associations with design quality and project efficiency. We also find that goal congruence, complementary capabilities and inter-firm coordination efforts increase Enhancing Buyer/Supplier Collaboration quality, while inter-firm relationship-specific investment reduces it.

Loice (2015) analyzed the effect of buyer-supplier relationships on procurement performance; evidence from Kenyan supermarket. The study was informed by social exchange theory. This study employed explanatory research design. The target population was 112 procurement and sales managers drawn from thirty-four (34) supermarkets located in Nairobi County. Census technique

was used. Data was obtained using structured questionnaires. Data was analyzed using descriptive statistics such as frequency, percentage, means, and standard deviation. In addition, Pearson correlation and multiple regression models were used to test linear relationship and hypothesis testing respectively. Study results showed that commitment, communication, cooperation and trust has a positive and significant effect on procurement performance. Hence, high levels of commitment, trust, communication and cooperation enhance sustainable competitive advantage hence improving the procurement performance. The study therefore recommends that there is need for firms to have a long term partnership with the major suppliers and aim at giving maximum attention to the relationship with suppliers so as to maintain it and enhance competitive advantage which will lead to improved procurement performance.

Mugarura (2010) analyzed buyer-supplier collaboration, adaption, trust, commitment and relationship continuity of selected private manufacturing firms in Kamala. A quantitative cross-sectional survey was conducted using a sample of 260 private manufacturing firms from a population of 877. Data collection was conducted using self-administered questionnaires to get data from the respondents. Overall, 257 usable questionnaires representing 98.85% respondent rate was attained. Factor, Correlation and regression analyses were used in data analysis. The results indicated a significant positive relationship between buyer-supplier collaboration and relationship continuity. Results also indicated that adaptation, trust and commitment are significant predictors of relationship continuity and collaboration also positively predicts adaptation, trust and commitment.

Corsten and Felde (2005) explored the performance effects of key-supplier collaboration; an empirical investigation into Swiss buyer-supplier relationships. The research question is empirically tested employing a sample of 135 Swiss buyer-supplier relationships and using structured equation modelling as well as multi-group comparison to test for quasi-moderation effects. The results demonstrate that supplier collaboration has a positive effect on buyer performance both in terms of innovative capability and financial results. As expected, trust and dependence play an important role in supplier relationships.. In view of the findings of these studies it is possible that buyer-supplier collaboration would enhance organizational performance of construction firms in Port Harcourt. However, it is hypothesized that:

**Ho1:** There is no significant relationship between buyer-supplier collaboration and reliability of construction firms in Port Harcourt.

**Ho2:** There is no significant relationship between buyer-supplier collaboration and organizational efficiency of construction firms in Port Harcourt

# Research Methodology

The cross-sectional survey research was adopted in this study. The study population comprised of 22 construction firms in Port Harcourt metropolis. The source for the population is finelib.com/cities/Port Harcourt/business/construction. The sample size for the study was 22 construction firms. 110 copies of structured questionnaire distributed for data collection. Out of which 90 copies were retrieved and used the analysis. The Pearson Moment Correlation Coefficient was used to test the hypotheses.

## **Decision Rule**

Reject the null hypothesis (H0) if PV < 0.05 for 2-tailed test and conclude that significant relationship exists.

# **Test of Hypotheses**

Ho<sub>1</sub>: There is no significant relationship between Enhancing Buyer/Supplier Collaboration and reliability in construction firms in Port Harcourt metropolis.

Table 1: Pearson Coefficient Correlation result on the relationship between Buyer/Supplier Collaboration and Reliability

Correlations				
		Enhancing		
		Buyer/Supplier		
		Collaboration	Reliability	
Enhancing Buyer/Supplier	Pearson Correlation	1	.943**	
Collaboration	Sig. (2-tailed)		.000	
	N	90	90	
Reliability	Pearson Correlation	.943**	1	
	Sig. (2-tailed)	.000		
	N	90	90	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 1 above shows the Pearson Correlation Coefficient (r) =  $0..943^{**}$ , this value is very high, implying that a very strong relationship exists between buying/supplier and reliability. The positive sign of the correlation coefficient indicates a positive relationship. That is to say that an increased in reliability is associated with the ability for buyer and supplier to collaborate in the studied construction firms. As shown in table the probability value is (0.000) < (0.05) level of significant; hence the researcher rejected the null hypothesis and concluded that there is a significant relationship between Enhancing Buyer/Supplier Collaboration and reliability.

Ho2: There is no significant relationship between Enhancing Buyer/Supplier Collaboration and organisational efficiency in construction firms in Port Harcourt metropolis

Table 2: Pearson Coefficient Correlation result on the relationship between Buyer/Supplier Collaboration and Organizational Efficiency

Correlations				
		Enhancing		
		Buyer/Supplier	Organizational	
		Collaboration	Efficiency	
Enhancing Buyer/Supplier	Pearson Correlation	1	.991**	
Collaboration	Sig. (2-tailed)		.000	
	N	90	90	
Organizational Efficiency	Pearson Correlation	.991**	1	
	Sig. (2-tailed)	.000		
	N	90	90	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 2 above shows the Pearson Correlation Coefficient (r) =  $0..991^{**}$ , this value is very high, implying that a very strong relationship exists between buying/supplier and organizational efficiency. The positive sign of the correlation coefficient indicates a positive relationship. That is to say that an increased in organizational efficiency is associated with the ability for buyer and supplier to collaborate in the studied construction firms. As shown in the table, the probability value is (0.000) < (0.05) level of significance; hence the researcher rejected the null hypothesis and concluded that there is a significant relationship between Enhancing Buyer/Supplier Collaboration and organizational efficiency.

# **Discussion of Findings**

The result from our analysis from table 4 we observed that Enhancing Buyer/Supplier Collaboration had a very high, positive and significant realtionahip with reliability, shown in table 2 where the probability value is (0.000) < (0.05) level of significance. Also, the relationship between Enhancing Buyer/Supplier Collaboration and reliability has an  $r^2$  Value of 0.  $.943^{**}$ , indicating a very strong relationship. This position is in line with that of Mugarura (2010) who reported a significant positive relationship between buyer-supplier collaboration and relationship continuity. In addition, Enhancing Buyer/Supplier Collaboration and organizational efficiency was found to be significant with the probability value is (0.000) < (0.05) level of significance. Meanwhile, the relationship between Enhancing Buyer/Supplier Collaboration and organizational efficiency has an  $r^2$ value of  $0.991^{**}$  implying a very strong relationship exists between Enhancing Buyer/Supplier Collaboration and organizational efficiency. This position is akin to that of Loice (2015) who reported that cooperation enhance sustainable competitive advantage hence improving the procurement performance

#### Conclusion

This study's conclusions are in line with the findings obtained from the outcome of its investigation. Therefore, the study concludes that the adoption of buyer-supplier collaboration positively and substantially relates to the outcomes of organizational performance such as organizational efficiency and reliability of construction firms in Port Harcourt.

## Recommendation

Therefore, based on the findings of the study, it was recommended that management of construction firms in Port Harcourt should adopt buyer-supplier collaboration to ensuring efficiency and effectiveness in the procurement activities and actions of their organizations.

## **REFERENCES**

Abdifatah, M. (2012). Supply chain management practices and their impact on performance among humanitarian organizations in Kenya. *International Journal of Supply Chain Management*, 2(1)88-103.

Arrowsmith S. (2002). Reviewing the OPA: The Role and Development of the Plurilateral Agreement after Doha, *Journal of International Economic Law*, 76 1-790.

- Bakker, E., Zheng, J., Knight, L. & Hatland, C. (2008). Putting E-Commerce Adoption in A Supply Chain Context, *International Journal of Operations & Production Management*, 28, 313-330.
- Barlan-Espino, A. G. (2017). Operational efficiency and customer satisfaction of restaurants: Basis for business operational enhancement. *Asia Pacific Journal of Multidisciplinary Research*, 5(1), 122-132.
- Bates, R. A., & Holton III, E. F. (1995). Computerized Performance Monitoring: A Review of Human Resource Issues. Human Resource Management Review, 5, 267-288
- Bateson, S. & Hoffman, C. (2011). The moderating effects of technological and demand uncertainties on the relationship between supply chain integration and customer delivery performance, *International Journal of Physical Distribution & Logistics Management*, 41(3), 253-276.
- Blery, E., Batistattos, N., Papastratou, E., Perifanos, I., Remoundaki, G., & Retsina, M. (2009). Service quality and customer retention in mobile telephony. *Journal of Targeting, Measurement and Analysis for Marketing*, 17, 27-37.
- Brown, D. (2005). Electronic Government and Public Administration. International Review of Administrative Sciences. 71(2), 241-254.
- Bourguignon A.,Les multiples fonctions du vocabulaire comptable l'exemple de la performance[The Multiple Functions of Accounting Vocabulary An Example of Performance], Comptabilité, Contrôle, Audit[Accounting, Control, Audit], Paris, Mars 1997; .
- Chin Chin, HSU., Vijay, R. K., Keah-choon, T. & Keong Leong, G. (2008). Information sharing, buyer-supplier relationships, and firm performance. *International Journal of Physical Distribution & Logistics Management* 38(4):296-310
- Corsten, D. & Felde, J. (2005)."Exploring the performance effects of key-supplier collaboration: An empirical investigation into Swiss buyer-supplier relationships", International *Journal of Physical Distribution & Logistics Management*, 35(6), 445-461.
- Danese, P., & Romano, P. (2011). Supply chain integration and efficiency performance: a study on the interactions between customer and supplier integration. Supply Chain Management: *An International Journal*, 16(4), 220-230.
- Davenport, T. (2008). Putting the Enterprise into the Enterprise System, Harvard Business Review, 76(4), 121-131.
- Dedrick, J., Xin Xu, S., & Xiaogou Zhu, K (2008). How does information technology shape supply chain structure? Evidence on the number of suppliers. *Journal of Management Information*

- *Systems*, 25(2), 41 72.
- Featherman, M., & Pavlov, P. (2003). Predicting E-Services Adoption: A Perceived Risk Facets Perspective, *International Journal of Human Computer Studies*, 59(4), 451-474.
- Hjelmborg S. E., Jakobsen P. S., & Poulsen S. T. (2006). Public procurement law: the EU directive on public contracts, Copenhagen, Djøf Publishing.
- Hsu, M. H., & Chiu, C. M. (2004). Internet self-efficacy and electronic service acceptance. *Decision Support Systems*, 38(3), 369-389.
- Johnson, M., & Whang, S. (2002). "E-Business and Supply Chain Management: An Overview and Framework". *Production and Operations Management*, 11(4), 413 423.
- Janda, S., Trocchia, P. J., & Gwinner, K. P. (2002). Consumer perceptions of internet retail service quality. *Journal of Internet Marketing*, 8(5), 50 58.
- Ohnston, R. (2005). The Determinants of Service Quality: Satisfiers and Dis-Satisfiers, *International Journal of Service Industry Management*, 6(5), 53-71.
- Kaplan, R.S., & Norton, D. P. (2001). *The balanced scorecard: Translating strategy into action*. Harvard Business School Press.
- Khan, M. M., & Fasih, M. (2014). *Impact of service quality on customer satisfaction and customer loyalty:* Evidence from Banking Sector.
- Kilibarda, M., Nikolicic, S., & Andrejic, M. (2016). Measurement of logistics service quality in freight for wardingcompanies: A case study of the Serbian market. *The International Journal of Logistics Management*, 27(3), 770-794.
- Klein, R. (2007). Customization and Real Time Information Access in Integrated E-Business Supply Chain Relationships, *Journal of Operations Management*, 25, 1366-1381.
- Koufteros, X. (1999). Testing a Model of Pull Production: A Paradigm for Manufacturing Research Using Structural Equation Modelling, *Journal of Operations Management*, 17(4), 467-488.
- Lancioni, R., Smith, M., & Oliva, T. (2000). The Role of Internet in Supply Chain Management Logistics Catches Up With Strategy. *Industrial Marketing Management*, 29(1), 45-56.
- Lee, F.K., Sheldon, K.M., & Turban, D. (2003). Personality and the Goal Striving Process: The Influence of Achievement Goal Patterns, Goal Level, and Mental Focus on Performance and Enjoyment. *Journal of Applied Psychology*, 88, 256-265.
- Loice, K. (2015). Effect of Buyer-Supplier Relationships on Procurement Performance: Evidence

- from Kenyan Supermarket, European Scientifle Journal, 1.
- Mugarura, J. T. (2008). Buyer-Supplier collaboration, Adaption, Trust, Commitment and Relationship Continuity of Selected Private Manufacturing Firms in Kampala.
- Nagle, T., F., & Hayes, J. (2006). The effects of business-to-business relationships on electronic procurement systems: An exploratory study Published in European Conference
- Parasuraman, A., Zeithami, V. A., & Berry, L. L. (1993). The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, 1-12.
- Pinprayong, B. & Siengtai, S. (2012). Restructing for organisational Efficiency in the Banking sector in Thailand: A Case study of Siam Commercial Bank. Far East Journal of Psychology and Business, 8, 29 42.
- Ricardo, R., & Wade, D. (2001). Corporate performance management: How to build a better organization through measurement driven strategies alignment; Oxford Butterworth-Heinemann.
- Richard, J.P., Devinney T.M., Yip, G.S. and Johnson, G. (2009) Measuring Organizational Performance: Towards Methodological Best Practice. *Journal of Management*, 35, 718-804.
- Robbins, S. P. (2000) Managing today. Prentice Hall, 2000. 651 p. ISBN 0-13-011672-6.
- Snider, K., & Rendon, R. (2008). Public Procurement: Public Administration and Public Service Perspectives. *Journal of Public Affairs Education*.
- Sulek, J. M., Marucheck, A., & Lind, M. R. (2006). Measuring Performance in Multi-Stage Service Operations: An Application of Cause Selecting Control Charts, *Journal of Operations Management*, 24(5), 711-727.
- Togar, S., & Sridharan, R. (2002). An Integrative Framework for Supply Chain Collaboration. *The International Journal of Logistics Management* 16(2).
- Trent, R. J. (2007). Strategic Supply Management: Creating the Next Source of Competitive Advantage. J. Ross Publishing, USA.
- Wilson, P. G.; Rowe R., (2008). A revision of the Indigofereae (Fabaceae) in Australia. 2: Indigofera species with trifoliolate and alternately pinnate leaves. Telopea, 12: 293–307
- Van Winkelen, C., & Mckenzie, J. (2011). Enable operational effectiveness: The handbook of practical ways to identify and salve common organizational problems for better performance knowledge works; Accessed from online. Library Wiley.com on 25th February, 2019.

Yan, T., & Dooley, K. (2017). Buyer-supplier collaboration quality in new product development projects. *Journal of Supply Chain Management*. 50(2) 59-83.