# EFFECTS OF SUPPLIER EFFECTIVENESS ON ORGANIZATION PERFORMANCE AT KENYA SEED COMPANY KITALE, KENYA

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*Abstract:* **Achieving competitive advantage in this competitive business environment is a challenge many managers face. Most organizations are faced with the delays in product delivery, ability of suppliers to concert their operating environment to create value. The supplier ineffectiveness, which affects organizational performance, which is as a result of reluctance to develop suppliers, build relations, and establish quality management and failure to use strategies which make suppliers a competitive advantage tool is a challenge. Even the process of developing suppliers, selection and retention has not helped either. The study was carried out to establish the effect of supplier effectiveness on organizational performance at Kenya Seed Company, Kitale. The main objectives which guided the research included: to establish the effects of Supplier agility on organizational performance; to investigate the process visibility on organizational performance; to find out the effect of supplier willingness on organizational performance and to determine effect of supplier capabilities on organizational performance. To explore these, a cross sectional study design was used. The target population was 360 from which 190 sample size was deduced for the study. Data was collected using focused group discussions and small groups discussions self-administered questionnaires, interview guides and content analysis to investigate the effect of supplier effectiveness on organizational performance. Findings showed that supplier effectiveness has significant positive and negative effects on performance. It was found that all the four components of supplier effectiveness influence the three dimensions of performance. The study also found out that where supplier effectiveness is high, the performance on organization is also higher, especially in areas that are affected by suppliers even though they may be internal to the buyer organization. It was therefore concluded that supplier effectiveness is an essential strategic tool for performance improvement. Hence organizations need to build relations that enhance supplier effectiveness so that performance of both the suppliers and buyer organizations can realize the benefits of this relationship in the supply chain network.**

*Keywords:* **Organization Performance, Process Visibility, Supplier Agility, Supplier Capabilities, Supplier effective -ness & Supplier Willingness.**

## 1. INTRODUCTION

Globally, modern competitive climate drives organizations demand to focus on their core competencies and outsource non-core activities to external clients. Organizations want to increase if not improve, all aspects of their operations. These organizations focus on operations that promise genuine success. Innovative strategies are required to create a competitive advantage that allows for streamlining costs to boost profitability, revenue enhancements, product design and organizational improvements to match customer demands, vendor organizational, delivery metrics, price effectiveness, inventory flow, positive, image drive, good internal and external networks and flexibility when dealing with financial uncertainties. These are operational activity outcomes that are hard to achieve alone (Irungu & Wanjau, 2011). The

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concerned organisation must seek strategic approaches towards realization of success that can boost operational, transformational and relational performances. In understanding this competitive organizational climate, emphasis is no longer put on competition between single firms, but rather on the competition between entire supply chains (Wagner, 2006).

Improving operational performance has taken center stage for business transformational initiatives. Innovative tools, approaches and technologies are enabling companies to better perform with greater agility, flexibility and precision. Acceptable level performance is no longer achievable through owning abundance of time, resources and money. Managers face significant challenges in managing operations (Gustafsson & Karlsson, 2012). Customers expect consistent, personalized relationships, yet they have multiple points of contact that often are distributed geographically and organizationally. They demand that products and services be delivered in days if not hours, yet hundreds if not thousands of individuals must successfully coordinate their delivery. The breadth and complexity of organisational operations now demand progressive approaches to assure operational success. Organistions operate in an environment characterized by constant change, shorter product lifecycles, and increased demand uncertainty. This drives organisations towards initiatives that enhance sustainable source of competitive advantage. These can be forces emerging as dominant competitive vehicle for organizations operating in uncertain and ever-changing business environment (Aberdeen Group, 2009).

Although the modern competitive organisational climate drives organisations towards focusing on their core competencies mainly and outsources non-core products or services to external suppliers, this approach has not been a common practice. Companies are becoming increasingly depending on external suppliers for resources and complementary capabilities. It is only a common practice in Europe, and United States of America where outsourcing contracts are procured to Asian industries (Holter, Grant, Ritchie, & Shaw, 2008). It means that the supply chain strength in these countries is quite stronger than that in Africa where the practice is minimal (Krauth, Moonen, Popova, & Schut, 2005). While some organizations are succeeding in some critical operational, transformational and relational areas of focus, most of them are not effectively managing these areas at all. Industry analysis suggests operational, transformational and relational performance gaps begin at the strategic level and carry through to a specific process breakdown. In addition, operations, transformational and relational functions often lack continuous improvement efforts targeting these inefficiencies and failure modes.

But these have to satisfy minimum overall performance standards.  Yet organizations need a mechanism to track supplier progress towards meeting organizational goals, and gives feedback to the supplier base on their individual performance. Good supplier performance is a key ingredient in enabling firms to achieve business performance excellence. But how can firms manage or even influence the performance of outside suppliers? Supplier effectiveness (SE) is being widely adopted as a method to understand and improve the performance of the extended enterprise (Gordon, 2010). It is built through effective communication, and clearly defined objectives. It includes critical processes to define measure and analyze supplier performance to meet business goals.

The individual supplier effectiveness is also essential to support MNCs on the holistic supply chain management. Although the significance of the buyer-supplier relationship has long been focused on literature of business and management, little has been studied for its mediating role in supplier engagement, supplier infrastructure, supplier Organisational and supplier commitment each on supplier performance in an organisation (van Veele, 2005). This study tries to address this gap in the literature by examining the impacts of buyer-supplier relationship in its mediating role to supplier performance instead of firm performance in manufacturing industries. A conceptual research model has been developed to investigate the relationship of these variables and hypotheses are tested for predictive inference. The findings reveal that supplier Organisational and supplier commitment could influence supplier performance with a help from the mediating role of buyer-supplier relationship (van Weele, 2010).

Supplier effectiveness (SE) is a key enabler for transforming into a mature purchasing organization. Measuring supplier performance is critical to ensure service level agreements, minimize risk, develop suppliers and reduce cost. The main objective of SE is to improve performance of both the supplier and the buying organization. By establishing supplier performance metrics a company can ensure that suppliers deliver according to contract agreements and market

norms. However, it is important not to think of SE only as establishing supplier scorecards but also as establishing effective business processes. There are five main areas that need to be considered when establishing effective SE. These include supplier-buyer relationship, leanness agility, willingness and capabilities (Parkash, & Kaushik, 2011).

# 2. RESEARCH OBJECTIVES

This study explored the following specific objectives:

i. To establish the effects of Supplier agility on organizational performance

ii. To investigate the process visibility on organizational performance

iii. To find out the effect of supplier willingness on organizational performance

iv. To determine effect of supplier capabilities on organizational performance

# 3. LITERATURE REVIEW

### 3.1 Theoretical Framework

**Transaction Cost Theory**

Ronald Coase, Chester Barnard, and Herbert Simon are among the early authors who describe the contributions of transaction cost theory to the existence of firms (Scott, 2003; Williamson, 2005). These aspects of transaction cost theory are supporting evidences for the role of supply chain management in organizations. Whether supply chain is viewed as a network or as an integrated process, the transaction cost theory explains the vertical connection and integration of various elements of organizational supply chain, from second tier and first tier suppliers to first tier and second tier customers.

Efforts to build and maintain the relationship with suppliers; cost of monitoring the performance of suppliers; resolving the problems that arise in the business relationships and engagement of suppliers in an opportunistic behaviour are common. However, transaction cost theory is primarily concerned with the direct economic factors in organizations and hence fails to address some important aspects of the operation of organizational supply chain, including personal and human relations among actors in the supply chain. Transaction cost theory is a valuable framework for describing the vertical integration in supply chain management studies. However, this theory mostly carries a neoclassical view of organizations as black boxes of operation.

**Agency Theory**

The agency theory was promoted with the seminal works of Max Weber (Beckert, and Zafirovski, 2006). The classic view of agency theory as develop by the works of Max Weber and others was mostly concerned with the conflict of interest between the political master and state officials. This view was built on the foundation of the neoclassical view of organization that views organizations as black boxes of operations, where the relationship between performance and incentives was overlooked (Beckert, and Zafirovski, 2006). New institutionalism view of organizations opened the black box of organizational operations and paved the way for the contemporary view of agency theory. In the old institutionalism view, opportunistic behaviour based on the rational system view was dominant. However, the new institutionalism view of the organizations, promotes the delegation of responsibilities and operation, through an open system view towards the environment.

### 3.2 Conceptual Framework

The independent variables for Supplier effectiveness (SE) include: supplier agility, supplier willingness, supplier capabilities and process visibility. These variables were investigated to determine their influence on organisational performance in public institutions in Kenya.
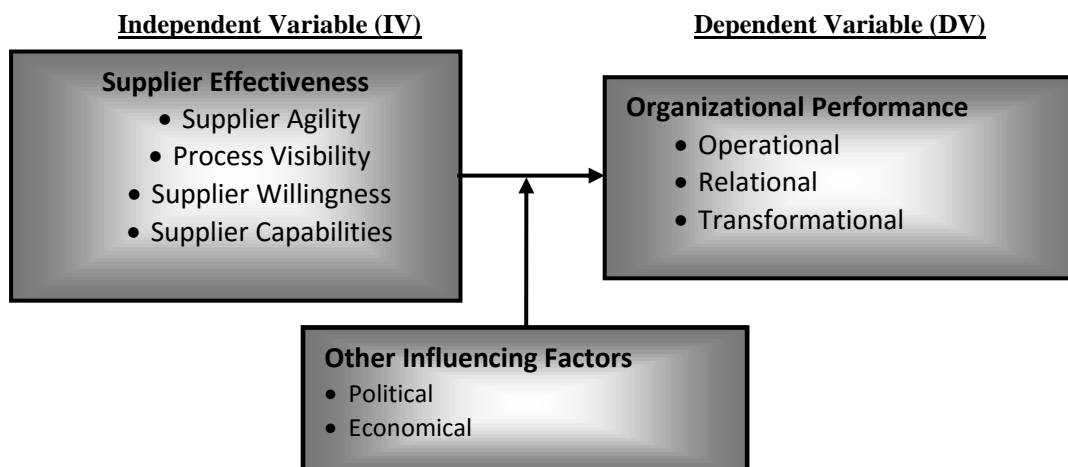
**Figure 3.1 : Conceptual Framework**

Supplier agility provides the basis of preparedness towards being alert, accessible, decisive, swift, and flexible (Gligor, 2015). These dimensions are form of resources and capabilities that companies must develop to achieve the desired level of agility. The companies can further improve their supplier agility by using a self-evaluation questionnaire based on these five dimensions to determine where they fall on the agility spectrum, whether corrective actions are needed, and where to make those corrections.

The current business environment is characterized by irregular customer demands, constant change, shorter product lifecycles, and increased demand uncertainty (Sheppard, Young, Doyle, Sheppard & Newton, 2006). As these conditions have become the norm, companies must have the ability to quickly detect changes, opportunities, and threats; the ability to quickly access relevant data; the ability to make decisions resolutely using the available information; the ability to implement decisions quickly and the ability to modify its range of tactics and operations to the extent needed to implement its strategy. This domain has emerged as the dominant competitive vehicle for organizations operating in such an uncertain and ever-changing business environment. An organisation that lacks ability to quickly detect changes, opportunities, and threats (alertness); quickly access relevant data (accessibility); make resolute decisions about how to act (decisiveness); quickly implement those decisions (swiftness); and modify its range of supply chain tactics and operations to the extent needed to implement its strategy (flexibility) cannot be able to achieve its competitive advantage in the modern business environment (Gligor, 2015). These five dimensions are useful in determining what supplier agility is and the level of organisational agility with suppliers.

## 4. RESEARCH METHODOLOGY

*Research Design*

This study adopted an exploratory study design. The exploratory design is appropriate for assessing whether the case organizations have experienced supplier effectiveness. This was necessary as it enabled the formulation of a precise problem for investigation and developing the study hypothesis. It enabled the study to present information regarding the immediate conditions, presentations of crucial issues, study of the unknown fields, theoretical base, and presentation of uncertain problem for study in research. This was crucial since this issue of supplier effectiveness and the three dimensions of performance pursued in this study were not clearly defined currently. Hence this design allowed the researcher to be acquainted with the problem and concept researched, and enabling the production of hypotheses tested.

This way, it enabled questionnaires to be discussed in the focus groups including small group discussions. This enabled the generation of better understanding of the issues needed to be filled in the questionnaire. It enabled the collection of the new information about supplier effectiveness and organizational performance. Finally, this design helped to fulfill the researcher's curiosity and need for greater understanding, to test the feasibility of starting a more in depth study, and also to develop the methods to be used in any following research projects. The design provided a representative sample from a target population of all other Kenya seed branches in the country.

*Population of the Study*

According to Ngechu, (2004) a population is a well-defined set of people, services, elements, things or households under investigation. Kothari, (2004) defines population as all items in a field of enquiry. The target population of this study was 360 employees of Kenya Seed Company in Kitale. The respondents were drawn from all the departments within the company since the effectiveness of the suppliers can be experienced within the entire organisations (See Table 3.1).

*Sample Size and Sampling Procedure*

According to Kothari, (2004), the sample size should be optimum in order to fulfill the requirements of Technical, representation, reliability and flexibility. While deciding sample size, the researcher determines the desired precision as also an acceptable confidence level of the estimate (Kothari, 2004). Mugenda and Mugenda, (2004) recommends 10% of accessible population is adequate. At least 10% sample of the population is considered a generally acceptable method of selecting samples in such a study (Stanley & Gregory, 2001). Kerlinger (2009) states that a 10% sample allows for reliable data analysis and provides desired levels of accuracy for testing significance of differences between estimates. Empirical study by Roscoe (1975), suggests that sample size should be larger than 30 and less than 500.

The sample size of this study was 190 respondents, which were picked through simple random sampling. Using confidence level of 95%; level off error of 5% and the target population of 360, the simple random calculator generated a population of 186. This was confirmed by the calculation of the formula given below that generated 189 and some decimal numbers this was rounded up to whole number generating 190. The participants were asked to voluntarily participate in the study by answering a questionnaire and the interview questions. This sample size produced adequate data for analysis and in making conclusive generation. Simple random sampling method was used to select respondents from various strata. Gay (2002) identifies random sampling as the best form of sampling as it allows all members of population to have an equal and unbiased chance of appearing in the sample.

This subsection covers the sample size and sampling technique. A sampling frame according to Cooper and Schindler is a list of elements from which the sample is actually drawn and is closely related to the population. A sample size was determined based on these registrants. A formula propounded by Cochran (1963) will be used to determine the size as follows;

$$n = \frac{N}{1 + Ne^2}$$

Where; n – is the sample size

N – is the population size

e – is the level of precision (95%; e = 0.05)

Given that N=360 (see Table 3.1); $e^2 = 0.05^2$ Therefore n= 360÷ (1+ (360*0.05²)= 189.47368 approximately 190, hence from the above a sample of 190 respondents that were selected for the study. The Institute of Economic Affairs (2009) defines a sample size as a function of logistics and homogeneity or heterogeneity of the population.

According to Sekaran (2006) adequacy, means the sample should be big enough to enable reasonable estimates of variables to be obtained, capture variability of responses and facilitate comparative analysis. Kothari (2004) recommends any large sample to be at least 10% of the target population. The sample of 190, which is 52.8% of target population, was therefore adequate to address the objectives of the study. The sub-sample in each stratum was calculated by multiplying the stratum population with the sample proportion as shown in Table 3.1.

**Table 1: Sample Size and Sampling Procedure**

| Category of Population | | Determination | Sample Size |
|---|---|---|---|
| 1. Top Level management | 20 | (20/360)*190 | 11 |
| 2. Middle Level | 80 | (80/360)*190 | 42 |
| 3. Operational Level | 260 | (260/360)*190 | 137 |
| **Total** | **360** | | **190** |

*Data Collection Procedure*

Data was collected through an administration of questionnaire distributed to the sample group of 200 participants and to an extend interview was applied where there was need for further clarification. The respondents were asked to answer questions without regard to gender, age, or qualifications. The questionnaire is preferred due to its ability to collect data from a large group within a short time.

*Data Collection Instruments*

The instruments that were used are the questionnaires and interview schedule. The questions covered areas of objectives of the project and the conceptual framework. Both primary and secondary data were used to obtain information for the success of this research. Primary data were obtained through self- administration of questionnaires and observations. These two methods were identified because of their advantages and ability to compliment the other. The respondents were required to fill the designed questionnaire so as to assist the researcher with the data that were needed in the study. The questionnaire was the main tool used in the research. The questionnaire consisted of questions and statements. Secondary data were obtained from research journals and the company reports and documents.

*Pilot Study*

A pilot study was conducted in a similar environment with 30 respondents drawn from Panar Seed Company. The process was repeated again using the same respondents after an interval of one week for reliability. Mugenda and Mugenda (2006), defines reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. A re-test method assessing reliability of data involves administering the same instrument twice to the same subjects.

Content validity of the instruments was determined through piloting, where the responses of the subjects were checked, against the research objectives. Mugenda and Mugenda (2006), defines validity as the accuracy and meaningfulness of inferences, which are based on the research results. For a research instrument to be considered valid, the content selected and included in the questionnaires must be relevant to the variable being investigated, (Neuman 2000).

*Validity of the Questionnaire*

Determining validity of the instrument was one indispensable characteristics of measurement that must be considered in establishing the appropriateness and usefulness of instruments of measurements. Although this instrument was valid, face and content validity of the instruments were established again by a panel of expert. Researchers generally determine validity by asking a series of questions, and often look for the answers in the research of others (Orodho, 2008). A pilot study was carried out to determine the validity of the questionnaire; a pilot study was conducted in a similar environment prior to the actual research. The participants in the pilot study were not included in the actual research.

Therefore validity of the instrument was realized after the researchers had examined the content of the instruments, through judgment of experts and the supervisors' validations, which guided the researchers. The study applied different techniques to assess the Cronbach's (1951) reliability coefficient alpha and to assess face and construct validity. In order to ascertain face validity, an initial questionnaire was passed through the routine editing after it was given to the panel of experts. They were asked to respond to the questionnaire. Very few comments were received and some minor changes were done to enhance the clarity.

*Reliability of the Questionnaire*

A reliability of the measuring instrument addresses the question of whether the results of the measuring processes are consistent on occasions when they should be consistent (Trochim, 2006). It is a statistical concept that is related to consistency and dependability, that is, consistency in obtaining the same relative answer when measuring phenomena that have not changed (Burns and Bush, 2010). Questionnaires have a very limited purpose as they are often one-time data gathering methods with a very short life, administered to a limited population (Norval, 2006). The following are important parts of reliability: test-retest reliability (coefficient correlation of stability). Consistency is estimated by comparing two or more repeated questions of the measuring instruments. This gives an indication of the dependability of the result on one occasion which may then be compared with the results obtained on another occasion and internal consistency reliability. This indicates how well the test items measure the same thing (Blumberg, *et al.,* 2005). In this study reliability of the

questionnaire was determined using a sample of respondents. The items were measured by a 5-point Likert-scale, which ranged from strongly disagree (1) to strongly agree (5). Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency to establish if certain items within a scale measure the same construct. Cronbach Alpha was established for every variable.

**Table 2: Reliability & Validity Analysis**

| Constructs | No. of Items | No. of items (.60 & above) retained | Alpha Value | Mean | Std Dev. | Variance Explained |
|---|---|---|---|---|---|---|
| Organization Performance | 15 | 12 | 0.7839 | 4.03 | 0.48 | 0.57 |
| Supplier Agility | 10 | 7 | 0.8102 | 3.87 | 0.441 | 0.52 |
| Process Visibility | 15 | 8 | 0.9195 | 3.79 | 0.609 | 0.63 |
| Supplier Willingness | 10 | 6 | 0.8761 | 4 | 0.452 | 0.58 |
| Supplier Capabilities | 10 | 6 | 0.7969 | 3.45 | 0.779 | 0.74 |
| **Total** | **60** | **39** | | **3.82** | | **0.6** |

*(Number of items retained that has corrected-item total >.40*

The results in Table 3.3 indicate that Supplier Willingness had the highest reliability ($\alpha$= 0.9195), followed by Supplier Agility ($\alpha$=0.8102), Process Visibility ($\alpha$=0.7969) and Organizational Performance ($\alpha$=0.7839). This is an illustration that all the four variables were reliable as their reliability values exceeded the prescribed threshold of 0.7. This concurs with Gliem & Gliem (2003) who established the Alpha value threshold at 0.7.

*Data Analysis and Presentation*

This study adopted both qualitative and quantitative analysis in order to achieve the objectives of the study. Descriptive methods were employed. The data was organized in tabular form and represented in frequency distribution tables and percentage distribution of the respondents. Quantitative techniques (frequency tables and charts) were used for the presentation of quantifiable data that were presented textually using descriptive and inferential statistics.

The questionnaires were collected and counted to ensure that all respondents had answered and completed the questions. The returned questionnaires were coded and captured on the computer. De Vos, *et al.* (2007) describes data analyses as the process of bringing order, structure and meaning to the mass of collected data. Questionnaires received from respondents, content analysis and interview schedules were checked for completeness with repeat calls being made for incomplete questionnaires to maintain the number of respondents. Categorization and coding was then done and data entered into SPSS for windows version 20 for analysis. Both descriptive and inferential tests were used in the analysis. Data was described or summarized using descriptive statistics such as mean and frequencies, which helped in meaningfully describing the distribution of responses. Various inferential statistics was used to infer population characteristics from the sample. Pearson's correlation coefficient was used to establish relationships between variables.

A multiple linear regression model was used to predict organization performance using the four independent variables in the study: Supplier Agility, Process Visibility, Supplier Willingness and Supplier Capabilities. In addition, the $\beta$ coefficients for each independent variable generated from the model was subjected to a z–test, in order to test each of the hypotheses under study. The regression model used to test is shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where; Y – Organizational Performance (OP)

$\alpha$ - Constant

$\beta_1$, $\beta_2$, $\beta_3$ and $\beta_4$ - Coefficient indicating rate of change of organizational performance as Supplier Effectiveness measured by its four dimensions of Supplier Agility, Process Visibility, Supplier Willingness and Supplier Capabilities changes.

$X_1$ – Supplier Agility (SA)

$X_2$ – Process Visibility (PV)

$X_3$ – Supplier Willingness (SW)

$X_4$ – Supplier Capabilities (SC)

Ɛ - Error term

All the above statistical tests were analyzed using the Statistical Package for Social Sciences (SPSS), version 20. All tests were two-tailed. Significant levels were measured at 95% confidence level with significant differences recorded at $p < 0.05$.

## 5. DATA ANALYSIS AND PRESENTATION

*Response Rate*

The response rate of the respondents is critical to this study because it reflects the in-depth of the data gathered. Questionnaire forms were used to collect data required for the study and a total of 190 questionnaire forms were distributed to the sampled participants. Out of the 190 questionnaires distributed, 150 (78.95%) were appropriately filled and returned, this were marked complete. The rest 40 (21.05%) were either not returned or were partially filled, and were marked incomplete and so were discarded during analysis. A response rate of 50% and above is acceptable (Mugenda, 2003). Therefore a return of 150 (78.95%) of the questionnaires was considered a success and acceptable for this research. The results are as shown in figure 5.1.
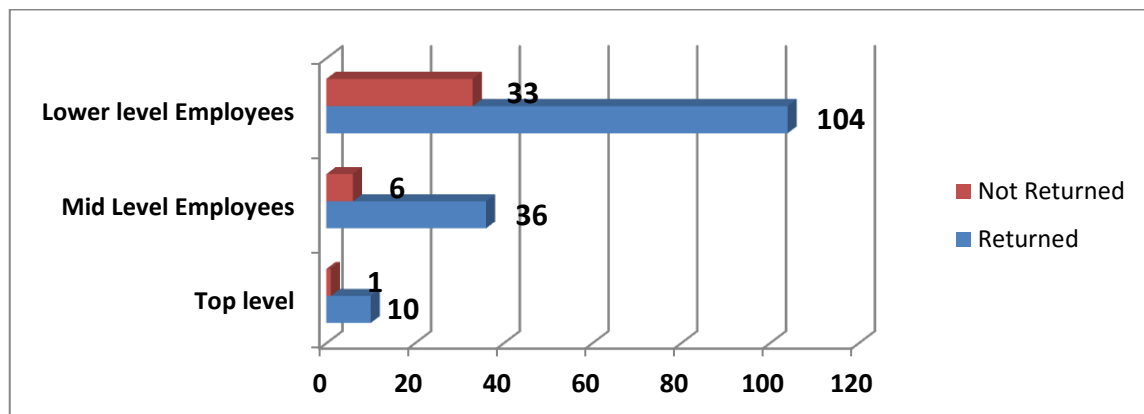


**Figure 1: Response Rate of Respondents**

As shown in figure 1 respond by the top level employees and mid level employees was lowest, this was attributed to the fact that mid level employees are the people who mainly undertake the affairs of the firms on a daily basis including administrative duties outside their firms barring them from getting ample time to participate in this survey. Although the participants were asked in advance to create time to participate in the survey and even scheduled specific days for this exercise, in this case it might have been that most of departmental heads (mid level employees) did not abide by this requirement or were not able to return their dully filled questionnaires to the researcher. The lower level employees had the highest response rate (80.0%). The higher response by lower level employees could be attributed to the fact that the researcher had a personal contact with them during administering the questionnaires. At the same time, this could be to the fact that they were able to create some time off their schedules to participate in this study. This is an indication of their involvement of matters relating to their firms.

*Multiple Liner Regression Analysis*

The result of regression analysis for both linear and multiple regression analysis provides the functions of the equation that represents the best prediction of a dependent variable from several independent variables. This method is used when the independent variables are correlated with one another and with the dependent variable. The following regression equation is estimated as follow:

$CE = α0 + β_1SA + β_2PV + β_3SW + β_4SC + ε$.....................................2

Where: OP: Organisational Performance

α0: Constant SA: Supplier Agility

PV: Process Visibility

SW: Supplier Willingness

CE: Supplier Capabilities

ε: Error term.

**Table 5: Summery of the Regression Model**

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .877[a] | .769 | .045 | 13.32000 | 2.393 | 4.000 | 95 | 0 | .000 |

  a. Predictors: (Constant), SA, PV, SW, SC

  b. Dependent Variable: OP

Table 5. Shows multiple regressions which is related to OP as dependent variable. The Table shows the influence of independent variable SA, PV, SW and SC on dependent variable OP. The Table indicates that the independent variables determine 76.9% of the OP variance. This means that the other factors influence OP by 23.1%.

*Multiple Regression Analysis*

A Multifactor linear regression model was used to predict organizational performance in the study. The prediction was carried out basing on the effect of the four independent factors: Supplier Agility, Process Visibility, Supplier Willingness and Supplier Capabilities. In addition, the b coefficients for each independent variable generated from the model was subjected to a t-test. The multiple regression analysis was evaluated to determine any effects of the independent variables on the dependent variable. This was important since it was necessitating the test of hypotheses on individual Supplier Effectiveness dimensions that included Supplier Agility (SA), Process Visibility (PV), Supplier Willingness (SW) and Supplier Capabilities (SC). The results are as shown in Table 6.

**Table 6: The Coefficients of Multiple Regression Analysis**

**Coefficients**

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 12.102 | 8.907 | | 1.359 | .177 |
| SA | 1.493 | 2.056 | -.074 | -.726 | .469 |
| PV | 1.194 | 4.501 | .026 | .265 | .791 |
| SW | .678 | .758 | .093 | 0.894 | .374 |
| S | -14.768 | 5.950 | -.249 | -2.482 | .015 |

  [a]. *Dependant Variable OP*

*CE = α0 + β₁SA + β₂PV + β₃SW +β₄SC + ε*

*12.103+1.493SA+1.194PV+0.678SW-14.768SC+ε*

Table 6 shows the relationship between independent variables namely SA, PV, SW, SC on dependent variable OP. Statically, there is significant relationship between four dimensions of the ET mechanisms used in this study; LA, PV, SW and SC, on the Organisational Performance (OP). It is clear that the increasing in the percentage of Supplier Effectiveness

dimensions, OP will increase although some components have decreasing effects. If the Process Visibility increases by 1, the OP will decrease by about -14.8. If Supplier Effectiveness components SA, PV, SW and SC are equal to zero, OP will be 12.103 units of level of performance.

## 6.  SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

*Summary of the Findings*

Taken at face value, the results of this project  suggest that supplier effectiveness is critical to the organisational performance. To evaluate what this means about the influence of supplier effectiveness dimensional competencies, it is important to recognize that there are different goals associated with such competencies and that some organisations may be interested in only one of them. If, for example, the aim is to give buyers upper chance of providing better services and product qualities to their clients, then suppliers become effective in the supply chain but this does not imply that suppliers who are not effective are merely retained in the supply chain of a buying organisation, this is why there are supplier development, selection and segmentation activities; this project  does not address this. If the rationale behind supplier effectiveness goes a step further and intends for agility, visibility, willingness and capabilities to provide networks that is reliable, relevant, and responsive to the desires of the buyers and the customers of the buyers for higher quality performance, then there is evidence that supplier effectiveness is critical in the supply chain network.

This is because implementing retention of suppliers who are non-performing are not spared hence those who earn effectiveness are only those who have shown improved performance to both the supply chain and the organisation.

Based on the findings, the study found out that majority of participants are male accounting with a proportion of over 67% of the total respondents, which means that there are more male suppliers owned organisations than female owned organisation suppliers and that male dominancy is a factor in supplier effectives in the supply chain. They command the entire networks with little representation of female participation respondents during the time of answering the questionnaire. The findings also affirmed that there were more married respondents, which may determine the decisions to frequently hope from job to job. The results also attested that majority of respondents had bachelors degree affirming that there were moderate levels of literacy among the respondents, a level of education that qualifies one to rank higher in performance since it enables one to acquire more knowledge, and skills for competency in productivity.

This implies that the modal age bracket was 25-44. The findings also affirmed that respondents have been in their work station or affirmed that majority of the participants have been with their current employer as from less than 10 years to 40 years confirming the organisational and supplier length of experience in this field that can be useful for development of effectiveness. It was also found out that majority of participants were at the lower level of management.

The findings on the level of organisational performance showed that there was performance that meets the expectations. Majority 70.0% (105) of the sampled respondents approved the performance of this level of performance. The historical data also coincides with these findings where in the annual reports growth performance surpassed 100%. That means the actual results were more than budgeted expected performance. This is an indication that the level of financial outcome is significantly stable. The other variable of performance measure in this study was relational. This is also confirmed by the findings as majority of respondents approved the relational level of performance as also meeting the expectations, especially exceptional 46% (92) that accounted for close to a half of the sampled population and in total, 76.0% (152) of respondents approved the relational performance of the firm as meeting the expectations. The performance based on transformational show that majority of respondents approved the level rating as exceptionally higher. This is also related to the level of education; desire to stay longer in the organization, training and development, various incentives that employees are able to access in this organization.

In general findings of organisational performance, of all the items of performance measures, it showed that Transformational scored the highest 79% (158), relational 76% (152), then operational at 72% (144) and finally relational which accounted for 70% (140). This may be attributed to the fact that these attributes are important in performance as they may be the drivers of Operational.

The findings of descriptive statistics showed that the mean scores of employee skills on performance is moderately stable at highest score of mean 3.9060 and standard deviation of 1.38329 with the least mean score of 3.0016 and standard

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deviation of 1.04037. This is an indication that generally the level of performance as influenced by supplier effectiveness is stable and higher. At the same time, mean scores for each indicator ranged from 2.0015(SD = .00145) to 2.23457 (SD = .10897). Relational had the highest mean scores, while organizational performance had the lowest mean and standard deviation scores. Overall, the item mean for organizational performance was 2.0015 (SD = .00145), which was within the lowest average level. This is an indication that the performance level is compliant with the individual items of measure hence a rating of healthy performance.

The study found out that majority of participants approved the statement that the supplier effectiveness enables accumulation of considerable knowledge base of the company's culture and its products and services. In relations to employee having experienced many changes within the workplace, and consequently understand what works and what doesn't, results show that strongly agree accounted for 52.7% (106), agree 35.3% (71), disagree accounted for 07.3% (15), and strongly disagree 02.7%(06). This is an indication that majority of the participants agreed that supplier effectiveness enable them experience many changes within the workplace, and consequently understand what works and what doesn't. At the same time, these results show that that strongly agree accounted for 51.3% (103), agree 34.0% (68), disagree accounted for 09.3% (19), and strongly disagree 05.3% (11). This is an indication that majority of the participants also agreed that tenure has enabled them develop quality standard and accuracy technique minimizing mistakes and resource wastage.

Moreover, from the findings one realizes that strongly agree accounted for 50.7% (102), agree 32.7% (66), none 02.0% (04), disagree accounted for 09.3% (19), and strongly disagree 05.3% (11). This implies that majority of participants approved the statement that supplier effectiveness has made buyers possess a keen understanding of procedures and techniques for increased financial management or revenue administration. Also participants with opinion of strongly agree accounted for 50.7% (102), agree 32.7% (66), disagree accounted for 10.0% (20), and strongly disagree 06.7% (14). This implies that majority of participants agreed with the statement that supplier effectiveness necessitates creation of routine success in service delivery.

Again these results reveal that strongly agree accounted for 49.3% (74), agree 34.7% (70), disagree 10.0% (20), and strongly disagree 06.0% (12). This implies that majority of participants agreed with the statement that the tenure necessitates cooperative work relations in groups and teams. In relation to measure that Ability to complete objectives and goals under pressure without supervision, the findings show that strongly agree accounted for 48.7% (98), agree 32.7% (66),none 02.7% (06), disagree 10.0% (20), and strongly disagree 06.0% (12). This implies that majority of participants accepted the statement that tenure enhances ability to complete objectives and goals under pressure without supervision.

The objective one stated the effect of supplier agility on organisational performance. The findings showed that reported that supplier agility is an essential component of their effectiveness. Supplier agility has enabled them to acquire considerable knowledge base of the company's culture and its products and services, have experienced many changes within the workplace, and consequently understand what works and what doesn't, developed quality standard and accuracy technique minimizing mistakes and resource wastage, possess a keen understanding of procedures and techniques for increased benefits of the supply chain, creation of routine success in service delivery, necessitates cooperative work relations in groups and teams and ability to complete objectives and goals under pressure without supervision. All elements that are performance based for improved productivity and in generally Supplier agility was (mean=2.68314). This means that higher level of supplier agility have an effect on the performance of this organsiation.

The objective two was to find out the effects of process visibility on organisational performance. The findings revealed that there was a strong positive correlation meaning that process visibility has a significant effect on the performance level of an organsiation. This means that higher process visibility will increase organizational performance.

The third objective of the project was to determine the effects of Supplier willingness on organisational performance. The findings showed a strong negative relationship between the two implying that weaker work environment means poor or lower level of performance.

The fourth objective was to examine the effect of supplier capabilities on organisational performance. The findings indicated that there is a significant positive relationship between them. This implies that where there are resources the ability to connect and convert these resources into products is possible, hence where there is poor level of performance

that requires improvements. The findings therefore showed that there are negative and positive effects of the four components of supplier effectiveness on organisational performance.

*Hypotheses Testing*

There were also four hypotheses that were tested by this project . Hypothesis  1 tested therelationship between supplier agility and organisational performance. The test findings showed that there was significantly positive relationship between supplier agility and organisational performance, supplier agility was negatively correlated to organisational performance (coefficient estimate ($\beta_1$ = 0.681, p value =0.000). There is moderately high degree of supplier agility has been found to influence the competitiveness of the organisation in terms of poor supplier productivity as they may intend to perform simpler activities in order to avoid this situation.

**Hypothesis   2** tested the statement that there is no relationship between process visibility and organisational performance. The findings revealed that there is no agreement with this statement, (coefficient estimates ($\beta_2$ = 0.311, p value =0.000). This showed that a high level of employee skill support system contributes immensely to organisational performance.

**Hypothesis 3** stated that Supplier willingness has no significant effect on organisational performance. The findings showed that there is no agreement with this statement since Supplier willingness has coefficient estimate ($\beta_3$ = 0.238, p value =0.018), hence hypothesis   3 does not hold. It means that higher level Supplier willingness improves performance as employees are dedicated to their assigned duties without fear

**Hypothesis 4** states that supplier capabilities have no significant effect on organisational performance. The statistical tests findings showed that there is inconsistency with the hypothesis  ; hence Supplier capabilities was correlated to organisational performance, (coefficient estimates ($\beta_4$ = -0.186, p value =0.000). This means that when organization attains level of being cost effective, there is an increased level of performance.

## 7.   CONCLUSIONS

These findings provided an environment that proves the supplier agility has an effect on organisational performance as it contributes to the improvement or decrease in performance, and an indication of its magnitude effect. From the study findings there is enough proof to conclude that supplier agility is related to performance level that meets the expectation, exceptional and that exceeds expectations.

There is also a proof that process visibility has an important role in improving organisational performance. Specifically, for supplier effectiveness with ability to disseminate these skills to the new recruits, performance likely to improve since there will always be a match in employee competency level.

There were also findings that Supplier willingness has a significant effect on organisational performance. This implied that stable work place support employee skill and knowledge development enhancing experience as there is no fear that the next move is sacking of an employee. The last conclusion made was that supplier capabilities have a significant effect on organisational performance. It is therefore prudent for the firms to ensure that there is supplier capabilities level in the system so that resources wastages are not encountered.

Finally the general conclusion is that supplier effectiveness has significant effects on organisational performance. The findings above provide evidence of proof that the components of supplier effectiveness are related to organisational performance either positively or negatively.

## 8.   RECOMMENDATIONS

From the findings and conclusions above, the project  makes the following comments: that it is not an offense for an employee whose desire is to find an organisation where he/she can work for longer period of time. At the same time, an employer who reaps talent and competency from employees owing to their long tenure has no reason to merely retrench or sack such employees only because they have overstayed. What is important is productivity and improvement in the work place. No organisation engages on introducing incentives that are expected to improve employee competency yet

after obtaining such incentives such employee is intended to leave next minute. That will be a poor management strategy. The findings have proved that there are indeed effects of supplier effectiveness on organisational performance.

The findings of this project deduced that supplier agility has a profound effect on organisational performance. This suggested that organisations with employees whose longevity is higher contribute to performance. Therefore, the organisations should strive to ensure that their effective suppliers keep improving on their efficiencies so as to be retained and work on a relational value creation network in the supply chain. The study finds strong support for the argument that process visibility has effects on performance, thus there should be an environment that encourages suppliers to obtain relevant information, consistency, competency reliability and trackability to enhance improved performance. This way, new and even ineffective suppliers will have a support base to improve and pursue competency.

The findings also indicated that Supplier willingness has a significant effect on performance. Thus the supplier effectiveness must maintain the environment that is stable to keep current and new ones without fear of being the next on axe line. The supplier willingness enables accumulation and acquisition of talents that are essential to performance improvement. Finally, supplier capabilities was also found to have a significant effect on organisational performance, therefore the organisations need to ensure that they work toward achieving this status to reduce unnecessary wastages of resources.

*Suggestions for Further Studies*

This study was done only in a sub-region, it is important for future studies to be done on a larger study area, such as the entire country. The other case was that this study did not look at the cause effects so it is important to carry out a longitudinal study of at least five years to determine the cause effects of supplier effectiveness on organisational performance. There is also the need to study the effects of short term and long term employment on performance.

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