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Influence of Public Procurement Practices On Service Delivery in Kilifi County Government, Kenya

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ABSTRACT: The concept of procurement has dominated most the functions of the county governments because of its value in the role of enhancing and promoting delivery of services. This research sought to study the influence of public procurement practices on service delivery in Kilifi County government, Kenya. The study was guided by the following objectives: To assess the influence procurement planning practice on service delivery in Kilifi County government; to find out the Influence of tendering practice on service delivery in Kilifi County government; to determine the influence of procurement policies on service delivery in Kilifi County government and finally to establish the influence of financial management practice on service delivery in Kilifi County government. The study adopted descriptive research design. The study was guided by three theories namely agency theory, stakeholders and contingency theory. Employees who dealt with procurement were selected purposively and census technique was adopted to select respondents from procurement department. The study population comprised of 70 respondents that included the procurement staff, head of procurement as well as committee members of the budget. Primary data was collected using closed-ended questionnaires. A pilot study was done in Mombasa County to determine any possible weakness in the instruments. Data was analyzed using Statistical Software for Social Sciences (SPSS). Cronbach Alpha used to measure the coefficient of reliability that yielded 0.788 in this study. Frequency distribution table were used in the presentation of the data. Multiple regression models were used to analyze data. The findings of the study showed that the predictors variables that included Procurement planning practice, Tendering Practice, Procurement Policy and Financial Management Practice explained 81.7% in the variation of service delivery in Kilifi County with the R square value (R^2 =0.817). The study concluded that independent variables significantly influenced the service delivery in Kilifi County with; Procurement planning practice X_1 ($\beta = 0.433$, p < 0.05); Tendering Practice X_2 ($\beta = 0.001$, p < 0.05); Procurement Policies X_3 ($\beta = 0.326$, p < 0.05) and Financial Management Practice X_4 ($\beta = 0.098$, p < 0.05). The study recommends that the county leadership should come up with relevant tendering policies to ensure openness, integrity and transparency in all tendering process. There should be strong financial management mechanisms to avoid wastage during procurement functions and processes. In addition, all county stakeholders should be involved in the procurement process for the purpose of ensuring timely service delivery in line with the procurement specifications.

KEYWORDS: procurement planning, tendering practice, financial management, service delivery, Kilifi county government

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INTRODUCTION

Procurement is an emerging business entity both in public and private institutions all over the world. It is one of the main functions of the business firm as the enables the organization to operate flawlessly. Procurement is basically referred to as the external process of sourcing for goods and services and negotiates prices for the benefit of the mother institution (Karanja, 2018). According to the Public Procurement and Asset Disposal Act (2015), procurement is the acquisition by the purchase, rent, lease, license, tenancy, franchise or any other contract terms of any work, assets, services that include livestock, advisory and planning in the supply chain industry.

Procurement practices are the application of strategies, procedures, tools used and all other activities that are related to the acquisition of goods and services (Kimani, 2019). This includes various activities which are combined and constitute the procurement practices. The procurement practice must be undertaken vigilantly by every organization and with caution and major effects to the functionality of every business firm. Procurement has effects on the costs, the lifespan of the acquired assets, the kind of the goods or services produced and the human resources in the organization.

Theoretically, procurement is done adhering to the Public Procurement and Disposal Act, 2015 (PPDA., 2015). Adherence to the Act constitutes to some of the best procurement practices. However, the deviance from the guidelines of the Act, could have various causes. Suitable procurement planning is crucial for the business firm to procure goods and services that are of good quality (Caldwell, 2019). Thorough provisions are essential from all stakeholders. These stakeholders request for the end users, entity, technical experts, procurement department as well as suppliers who provide appropriate specifications. This fully depends on the nature of procurement to be done. For effective and efficient process to be realized there should be proper planning, policies and financial management.

The procurement practices in Kenya are faced by various challenges. They include but not limited to: lack of government support; government circulars, political willpower, insufficient shortage of trained workforce in the procurement department and poor attitude towards the stakeholders. Other obstacles are accountability and transparency issues, shortage of knowledge and skills from bidders/contractors and poor implementation of PPDA Act 2015. Tendering is the main procedure of procurement where prospective suppliers are invited to bid and agree in writing on the terms of service on the specific goods to be supplied, services to be offered or the general works where the acceptance is on the basis of consequent contract (Caroline, 2018). The main goal of taking the tender process is to be sure that the public resources are used well and economically and the value of money is gotten in a timely and prompt quality goods and services offered. Tendering ensures efficiency through implementation of proper laws and at the long run ensures accountability and transparency. Tendering is guided by Public Procurement Act (2015) in Kenya whereby the process should be based on the principle of competition, fair selection and accessibility of information, openness and correctness.

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Proper procurement plan creates efficiency, effectiveness and protection of the public funds with strict observance to the procurement laws (Raymond, 2018). To evaluate the procurement practices and the factors that influence them, it would be paramount to find out why some public institutions fall short of exercising eminent procurement practices. This helps the affected areas that are related to the county government procurement to make the most needed changes. The Constitution of Kenya 2010 was enacted to demarcate the nation into 47 devolved units and the procurement departments were as well devolved from the national to county governments (Kakwezi, 2020). Kilifi County was one of the devolved units that was created by the Constitution of Kenya and it is against the above background that this study will establish the factors that influence the public procurement practices on service delivery in Kilifi County.

Public procurement is guided by the Public Procurement and Disposal Act, 2015 and the Public Procurement and Disposal Regulations, 2020 that was published in the Kenya Gazette Supplement No. 53 on 22nd April, 2020, Legislative Supplement No. 37, Legal Notice No. 69. The public procurement process supervision role is carried by the Public Procurement Oversight Authority (PPOA). This body also prepare and circulate other guidelines related to public procurement defining how the process should be carried out which are specific to the industry or situation. Procurement in the county governments is guided by one such set of guidelines referred to as the County Governments Procurement Regulations 2013. Public procurement is guided by other regulations that make the interpretation and implementation of the Act easier and more uniform across various procuring entities. Since this study relies on procurement practices in County Governments and specifically Kilifi, procurement in the county will be studied in relation to the use of and adherence to the requirements of the stated regulations. Public procurement is where the public entity procures goods, works and/or services from the market (Lewa, 2017). This definition brings to light the many aspects that have to be considered whenever the issue of public procurement is to be discussed or even practiced. Some of these aspects include a clear understanding of whether a given entity is a private or a public organization, the whole process of purchasing and the procedures involved, as well as the legal considerations in such a process.

Specific Objectives of the Study

- i.To assess the influence procurement planning practice on Service delivery in Kilifi County government.
- ii. To find out the Influence of tendering practice on Service delivery in Kilifi County government.
- iii.To determine the influence of procurement policies on Service delivery in Kilifi County government.
- iv. To find out the influence of financial management practice on Service delivery in Kilifi County government.

LITERATURE REVIEW

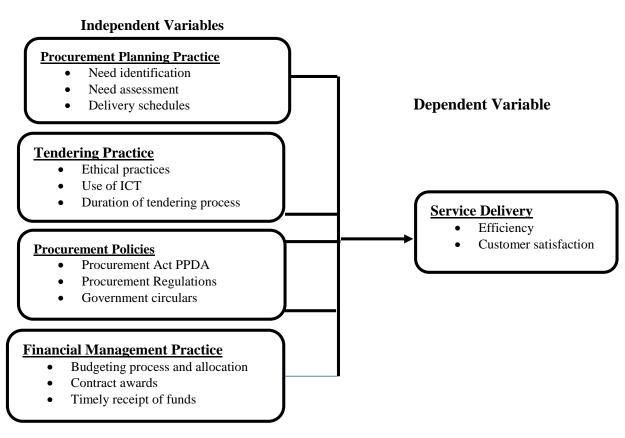
The study adopted the following theories; Agency theory, Stakeholder's Theory and Contingency Theory

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Conceptual Frame work

This is the set of wide conception that is extracted from a particular area of study to form the guidelines for presentations (Lisa, 2010). Further, it is important for helping the researcher in tracking the study. The independent variables for this study are the procurement planning, tendering practice; procurement policies and financial management practice whereas the dependent variable is Service delivery of the county government of Kilifi County.



Source: Researcher (2022)

Figure 1: The Conceptual framework

Influence of Procurement Planning Practice on service delivery in Kilifi County Government.

Procurement Planning is the process consisting of various steps concerned with futuristic decisions and the impact of choices made today (Thai, 2018). The foundation of the process procurement is the realization of the need and the requirements identification (Republic of Kenya, 2017). This

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process is participatory by involving the users who forward their plans to the management. This is informed by the inventory status, project planning, and schedules of production.

Ocharo, (2019), asserts that procurement planning is identified as a factor and the plan describes all the goods from the outsourced suppliers required to support the needs of various departments. For the project needs to be outlined, the supplies should allow adequate budgets as well as proper procurement planning. However, the attention of departments is attracted by the annual procurement plans to the opportunities of procurement through the outlook of strategic procurement, supported by the details of the procurement planning. It was found out that procurement plans influence performance. This is because they provide focused and efficient utilization of the available resources, help in planning, process of budget and provision of adequate funds. The case study above confirms the significance of procurement planning to ensure organizational performance.

Patrick & Wallace, (2018) asserts that procurement planning has positive impact on service delivery in secondary schools. The study recommended that the plans of procurement should be dynamic with a participatory preparation that is reviewed frequently to improve the value for public resources. The procurement planning has the potential of cutting costs, reducing the timelines and improves stakeholder relationship, reduction of risks and improvement of the overall performance (Kenard, 2017). Kenard (2017) further explained that procurement planning is observed in terms of cost, quality, flexibility and delivery of goods and services which that influence competitive advantage in terms of getting to the customer requirements. Caroline (2018) opines that appropriate procurement planning leads to an effective and efficient service delivery in the county systems in Kenya. These results were as well noted by (Ogwel, 2020) that budget planning influenced procurement performance and the management played an important role to ensure that the employees are competent, availability of resources, adherence of budget allocated and training of employees to improve on their skills and knowledge. The suppliers as well play an important role that ensures goods and services are supplied timely according to provisions and catalogues.

Influence of Tendering Practice on service delivery in Kilifi County Government.

Public institutions spend money in billions annually on goods and services that are needed by the members of public. The value for the taxpayers' funds is achieved, effectively managed and procurement execution is important. Effective procurement is guaranteed by equal and fair competition hence effective use of scarce public resources, thereby leading to the wellbeing of the country (Rotich, 2019). Procurement of units and suppliers should be built on a common understanding on the principles of competitive bidding which can be changed by a brief timeframe, biased specifications and insufficient publication. When the public institution opts to choose a method of procurement that is less competitive, it may omit some suppliers who may not have access to the media where the procurement has been advertised thus prejudicing some interests of the suppliers.

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Kenya and other developing countries are characterized by low competition coupled without formal competition policy. Measures of regulating and promotion of competition makes procurement more open and gives prospective benefits to enhance the competitiveness and efficiency of a good working environment (Rono, 2017). The law guided by the public entities on the choice of procurement processes is the Public Procurement and Disposal Act 2005 (PPDA, 2005) whereby all the public institutions are supposed to use open tendering as the only procurement choice process but allowed to use an unconventional procurement procedures during the times of imperative need (Juliana, 2013).

Athumani., (2015) did a research on the effectiveness of public tendering process in Tanzania under the Ministry of Health and Social Welfare. He indicated that tendering process is administered in line with the laid down regulations. The study clarified further the importance of exercising accountability and transparency in the entire process. There is the issue of uncounted details in the process that include but not limited to use of defective documents, regulation and standard tender document, wrong interpretation of the Act, unethical behavior among the employees of the public institution.

Beatrice, (2014) did a study in Nyeri County on the factors influencing the effectiveness of tendering process and concluded that duration of tendering process influences the effectiveness positively while unethical practices have negative influence on the tendering process. Ethical behavior at the workplace facilitates accountability, transparency and responsibility during the open tendering process thus encouraging the interested suppliers to work with the government. The government employees should be trained in regard to ethical awareness which is key to promotion of moral behavior within the public institutions (Amos, 2018). A study on e-procurement conducted by (Johnston. 2014) argued that internal compliance is grave to the accomplishment of efficiency gained from e-procurement. The compliance level with electronic procurement influences the general disposition to gain the perceived benefits. Moreover, customer satisfaction is key in the adoption, implementation and deployment of such systems.

Electronic tendering process reduces the time spent by more than half hence reducing the procurement cycle and transaction cost (AfriCOG, 2016). Further findings concluded that the devolved units are poorly designed as they translate to lack of accountability, the national government bureaucracies and inefficient utilization of taxpayer's resources. The electronic procurement is more beneficial to both the procuring entity and suppliers because of its speed and coverage hence increasing transparency in the process and meets the required threshold for the tenders to be openly advertised. Therefore the electronic system of tendering has attracted both private and public organizations' attention especially in the last few years leading to the potential of improving national productivity growth of the nation.

Influence of Procurement Policies on service delivery in Kilifi County Government.

Service delivery in public institutions is influenced by the procurement policy factor. Nichols, (2012) explains the procurement policies as the key functions of procurement that has the capability to contribute to the realization of the objectives set out by the government. These

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policies set the entire acquisition in motion or the process of acquiring these services in public institutions. The procurement policies facilitate an efficient and effective performance and service delivery in the public sector by being undisputed in developed and developing nations (Caroline, 2018).

Davis, (2014) asserts that public procurement is a tool, mechanism or even a lever that promotes policies like economic and industrial development. These policies are precisely labeled to desired results and the government tries to achieve them through specific procurement policies. The procurement policies are as well referred to the principles such as integrity, transparency, value for resources and competition. These conducts of public procurement refracts the attention from the policy aspect that determine the extent of contributing the desired outcomes. However, there is very little attention given to the study of public procurement policies.

Influence of Financial Management Practice on service delivery in Kilifi County Government.

Financial management is a process of ensuring that funds are readily available in public institutions and used efficiently and effectively manner for the benefits of taxpayers (Waddell, 2019). According to Alexander, (2019), financial management involves the planning, directing, organization and controlling. It is one of the procurement practices that is important for all public entities that include budgeting and proper controls. The outline contains the systems, process, internal controls and all other practices related to the way every department manages its affairs including revenue, expenses, assets management, liabilities and finally contingencies.

Ochieng, (2015) studied how corporate sector affects financial management in Kenya where there was consideration of the internal controls, monitoring and evaluation and record keeping. Forty companies were sampled operating within the country in diverse sectors and the results proved to be significant and positive (Kabaj, 2019). On the same breath, Kakwezi, (2020) illustrates that the procurement department in public institutions in Uganda access very little information regarding the procedures of procurement, resource consumption, inputs, outputs and the results, thereby failing to determine their efficiency and effectiveness. This is an indication that such a challenge should have an established clear procurement process and standards. When these standards are adopted, they provide the management with impartial information in regards to the performance of procurement function (Parasuraman, 2016). When the implementation is completed, the conclusion from the department is provided in terms of the functions of procurement.

Public Procurement and Disposal Act (2005) (PPDA, 2005) has a provision that all procurement departments should be within the approved budget and procurement plan and be handled by different officers in the procurement department in respect to the process recognized by law. In regard to the same Act, the procuring entity should have clear specifications in relation to the procurement of goods and services and the process should be open for competition and fair. Wanyonyi, (2015) in his findings states that procurement process should be well incorporated into the budget process which would eventually result in saving cost and efficient services. Financial stability of the supplying entity reflects on the capability to supply and meet specific contract

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requirements with the procurer for a secured flow of suppliers (Lysons, 2013). The records of finance show that the delivery risks or quality issues that may bring up complex legal issues in case the supplier becomes insolvent (Alexander, 2019). In addition to this, the study found out that the purchaser should get to know various financial materials that would assist into come up with better choices on suppliers' financial stability.

Public procurement is basically termed as politically complex all over the world (Davis, 2014). However, Pillary, (2017) in his book has a contrary opinion that political leaders and government officials use public offices to gain wealth hence making the institutions weak and lower the motivation to be honest. This consequently interrupts the procurement process and limit compliance of the policies set in place by law. In most developing countries, Kenya included, the major obstacle to the procurement system is the interference of the senior government officials with the tendering process where they intervene and influence awarding of the tenders. The threats of suspension or firing intimidate public officers into abiding by the illegal directives from senior government officials.

From the contractual point of view, Alexander, (2019) found out that, besides the public procurement regulations and government circulars, the legal environment and Acts governs all procurement functions in the public sector including research development, manufacturing, finance, marketing and personnel. In developing countries like Kenya, legal systems are not detailed and government contracts have comprehensive clauses that define basic principles (AfriCOG, 2016). As explained above, the procurement policies have influence on service delivery in the devolved units due to the nature of Kenyan politics. Further, the law governing the aspect of service delivery has a great perspective of the service provider to the taxpayers who are the end users.

RESEARCH METHODOLOGY

Research Design

This study was guided by the descriptive survey design. This design provides an outline of the existing relationships and conditions about the problem being investigated (Kothari, 2004). This design allowed the researcher to have a provision of deep insight into a particular subject and focus on inspecting the detailed aspects of this study. The design played an essential part to identify various the influence of procurement practices i.e procurement planning, tendering, procurement policies and financial management and their effectiveness on the service delivery of the County Government of Kilifi. Descriptive survey design is preferred by most researchers because it gives the exact report on the findings of the study. The study will apply quantitative and qualitative techniques that will involve the use of arithmetic to describe perception, attitudes and observation of procurement practices within Kilifi County.

Target Population

This is the set of items or elements that share characteristics and the researcher intends to generalize results of the study (Mugenda, 2013). The study targeted all two hundred and ten (210)

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senior staff members working in the procurement, finance, Human resource, Inspectorate, budget committee and ICT departments in the Kilifi County Government. The table 1 below shows the target population.

Table 1: Target Population

| Respondents | Population | |
|---------------------------|------------|--|
| Human resource department | 25 | |
| Finance department | 55 | |
| Inspectorate Department | 22 | |
| ICT department | 35 | |
| Procurement Department | 60 | |
| Budget committee members | 13 | |
| Total | 210 | |

Source: HR, Kilifi County Government (2022)

Sample and Sampling Procedure

A sample is a representative of a group of individual units, records or observations from a more important population (Kothari, 2004). The study applied stratified random sampling. Therefore 65 respondents were considered for this study representing 30% of the total population. The employees of Kilifi County were purposely sampled as the population targeted only those responsible in the procurement functions. The purposive sampling is a non-probability sampling that gives actual results when one is in need of studying some culture that has knowledgeable experts. The choice of purposive sample was important as the data gathered was off good quality hence, the findings were reliable and competence (Trochim,2016). From the total population of the Kilifi County employees, only those responsible for procurement were considered. The table 2 shows the sample size

Table 2: Sample size

| Respondents | Population | Sample Size |
|---------------------------|------------|-------------|
| Human resource department | 25 | 8 |
| Finance department | 55 | 17 |
| Inspectorate Department | 22 | 7 |
| ICT department | 35 | 11 |
| Procurement Department | 60 | 18 |
| Budget committee members | 13 | 4 |
| Total | 210 | 65 |

Source: HR, Kilifi County Government (2022)

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DATA ANALYSIS AND DISCUSSION

Influence of Procurement Planning Practice on service delivery in Kilifi County Government.

The researcher sought to determine the extent to which procurement planning influence service delivery in Kilifi County Government. The findings of the study as shown in Table 3 below indicates that (Aggregate mean value=3.8, standard deviation=1.09). This shows that majority of respondents agreed that procurement planning influence service delivery in Kilifi County Government.

There was a consensus among the respondents that the need identification is done on all goods and services procured in Kilifi County at a mean of 4.00 and standard deviation of 1.17. Further, the need assessment was done before any procurement activity was undertaken and the agreement level of the respondents was at a mean of 4.10 and standard deviation of 1.11. The respondents were as well in agreement that the preparation of delivery was strictly done at a mean of 4.42 and standard deviation of 0.82. These findings are in agreement with (Kenard, 2017) who argued that a good procurement plan should identify the items required to be procured by defining the acquisition process and doing proper delivery schedules. The county government involves all stakeholders in the procurement activities with an agreement of the mean of 2.37 and standard deviation of 1.18. It is rare for the county government to call upon all the stakeholders from the requesting entity, end user (tax payers), departments involved, experts and contractors. However, (Caldwell, 2019) made a conclusion in his study that detailed specifications are important from the stakeholders involved. The effectiveness and efficiency of procurement planning in terms of service delivery was agreed at the mean of 4.24 and standard deviation of 1.15 and the service delivery in terms of procurement planning had a mean of 4.65 and standard deviation of 1.11. Therefore, the finding in this study is in agreement with (Ocharo, 2019) that there is a positive relationship between procurement planning and service delivery.

Table 3: Descriptive statistics on Influence of Procurement Planning Practice on service delivery in Kilifi County Government

| Statement | N | Mean | SD |
|--|----|------|------|
| Need identification is done on all goods and services procured | 62 | 4.00 | 1.17 |
| Procurement activities are undertaken after need assessment | 62 | 4.10 | 1.11 |
| Preparation of delivery schedules is strictly done concerning procurement services | 62 | 4.42 | 0.82 |
| The county government involves all stakeholders regarding procurement activities | 62 | 2.37 | 1.18 |
| Procurement planning is effective and efficient | 62 | 4.24 | 1.15 |
| Service delivery and general performance in terms of procurement planning is at | 62 | 3.72 | 1.11 |
| the optimum. | | | |
| Aggregate Value | 62 | 3.80 | 1.09 |

Source: Field Data (2022)

Influence of Tendering Practice on service delivery in Kilifi County Government.

This study sought to find out from the respondents on their opinions on the extent to which they agreed with the statements under tendering practice in the Kilifi County Government as shown in

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table 4. Majority of the respondents agreed that Tendering practice influenced service delivery in Kilifi County government with (Aggregate mean of 3.97 and standard deviation of 0.99). The study found out that all the respondents agreed that the legal tendering process was followed duly at Kilifi County Government with effectiveness at a mean of 4.47 and standard deviation of 1.00. However, the researcher wanted to know the extent to which the respondents agreed with the effectiveness and efficiency of access to information in relation to tenders and they moderately agreed to a mean of 4.11 and a standard deviation of 1.18.

The respondents further agreed that the selection of suppliers and contractors is critical in the tendering process at a mean of 4.56 and the standard deviation of 0.88. There was a slight agreement that integrity is adhered to during the tendering process at a mean of 2.66 and standard deviation of 0.99. Further, there was a strong agreement from the respondents that tendering process at Kilifi County Government is effective in enhancing service delivery at a mean of 4.48 and standard deviation of 1.00.

On the other hand, a big number of the respondents disagreed that there was openness and fairness among to a mean of 1.95 and standard deviation of 0.97 and finally most of the respondents agreed that there was use of ICT during the tendering process at a mean of 3.72 and standard deviation of 0.99. Thai, (2018) argued that fair and open procurement using ICT leads to equal and leveled competition among the contractors leading to effective use of taxpayer's resources and therefore contributing to the welfare of the national cake.

Table 4: Descriptive statistics on Influence of Tendering Practice on service delivery in Kilifi County Government

| Statement | N | Mean | SD |
|--|----|------|------|
| There is strict adherence to all the legal tendering process | 62 | 4.47 | 1.00 |
| There is openness and fairness in tender awards in this county | 62 | 1.95 | 0.94 |
| There is effectiveness and efficiency on information access in relation to tenders | 62 | 4.11 | 1.18 |
| Selection of suppliers and contractors is critical in the tendering process | 62 | 4.56 | 0.88 |
| Integrity is adhered to during the tendering process | 62 | 2.66 | 0.99 |
| Tendering process is effective in enhancing service delivery | 62 | 4.48 | 1.00 |
| ICT is used during the tendering process | 62 | 3.72 | 0.99 |
| Aggregate Value | 62 | 3.97 | 0.99 |

Source: Field Data (2022)

Influence of Procurement Policies on service delivery in Kilifi County Government.

This study sought to find out from the respondents on their opinions on the extent to which they agreed with the statements under the influence of Procurement Policies on service delivery in Kilifi County Government as shown in table 6 below. In this study the respondents agreed that

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Procurement Policies had influence on service delivery in Kilifi County Government with (Aggregate mean of 4.28 and standard deviation of 0.9)

The respondents were asked to indicate if the County Government of Kilifi had a procurement policy that governs all its activities with a mean of 3.95 and standard deviation of 1.14 but when asked about the national governing policy, they responded with a mean of 3.94 and a standard deviation of 1.17. A statement was posed to the respondents if the county leadership view procurement functions as vital as other departments for the purpose of achieving its mission and obligations and the response was a mean of 4.24 and a standard deviation of 0.90. The respondents were further in agreement that the procurement regulations hamper the operations of the county for speedy acquisition and contractual arrangements at a mean of 4.48 and standard deviation of 0.60. As much as majority of the respondents were in agreement of the statement, there was variation that led to the low standard deviation.

Finally, the respondents were requested to indicate their level of agreement on how contractual arrangements are considered on the basis of cost transfers leading to major effect on the delivery of services at the county of Kilifi. The response had a mean was 4.40 while standard deviation was at 0.88.

Table 5: Descriptive statistics on Influence of Procurement Policies on service delivery in Kilifi County Government

| Statement | N | Mean | SD |
|---|----|------|------|
| This County has its own procurement policy governing all procurement activities | 62 | 3.95 | 1.14 |
| | 62 | 3.94 | 1.17 |
| The county leadership view procurement functions as vital as other departments for the purpose of achieving its mission and obligations | 62 | 4.24 | 0.90 |
| The procurement decisions are influenced by the County Governor | 62 | 4.48 | 0.83 |
| The county's procurement spending is neither managed nor influenced by the procurement department/office | 62 | 4.10 | 1.00 |
| The procurement regulations hamper the operations of the county for speedy acquisition and contractual arrangements. | 62 | 4.48 | 0.60 |
| The county procurement function is influenced by the national policy | 62 | 4.64 | 0.68 |
| The contractual arrangement is considered on the basis of cost transfers that may affect the general service delivery of the county | 62 | 4.40 | 0.88 |
| Aggregate Value | 62 | 4.28 | 0.9 |

Source: Field Data (2022)

The finding of this study was in agreement with (Rono, 2017) who argued that an organization that manages procurement policies well would lead to greater financial performance that comes from the avoidance of poor procurement specialists. He further noted that procurement policies

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are important when it comes to efficient service delivery thus improved procurement performance. Additionally, (Basheka, 2020) argued that failure to follow the right procurement policies leads to corruption and ultimately hinder compliance of procurement rules and regulations that adversely affects performance and service delivery. corruption and ultimately hinder compliance of procurement rules and regulations that adversely affects performance and service delivery.

Influence of Financial Management Practice on service delivery in Kilifi County Government.

The majority of the respondents agreed that Financial Management Practice influence on service delivery in Kilifi County Government with (Aggregate mean of 4.36 and standard deviation of 0.97). The issue of financial management was measured by the use of the following parameters: reciepting of funds on timely manner has effect on procurement function, allocation of budgets for different county projects, approval of budget, poor management of funds, the important role played by accountability and adequate resources available has effect on service delivery.

This study found out that Majority of the respondents were in agreement that reciepts of funds on a timely manner has effect on procurment function at the County Government of Kilifi at a mean of 4.53 and standard deviation of 0.88. The allocation of budget was effectively done for different projects at the county government of Kilifi at a mean of 4.03 and standard deviation of 1.00. The respondents were as well in agreement that the approval of budget by the Members of County Assembly has effect on procurement of different services at Kilifi County Government at a mean of 4.10 and the standard deviation of 1.20 which clearly indicated that majority of the respondents strongly agreed to the statement and deviation was high. Further, majority of the respondents were in agreement that accountability has an important role when it comes to the management of funds set aside for the procured goods and services with a mean of 4.48 and standard deviation of 1.20. Finally, the respondents were in agreement that the availability of adequate resources has effects on the services delivered at Kilifi County Government at a mean of 4.64 and standard deviation of 0.68.

Table 6: Descriptive Statistics of Financial Management

| Statement | N | Mean | SD |
|---|----|------|------|
| Timely receipts of funds affect the procurement function | 62 | 4.53 | 0.88 |
| There is effectiveness during the budgetary allocation for various projects | 62 | 4.03 | 1.00 |
| Budget approval by the Members of County Assembly members greatly affect | 62 | 4.40 | 0.88 |
| the procurement of various services at the County | | | |
| Mismanagement of funds impact the service delivery at the county level in terms | 62 | 4.10 | 1.20 |
| of procurement activities. | | | |
| Accountability plays an important role in the management of funds allocated to | 62 | 4.48 | 1.20 |
| the procured goods and services | | | |
| Availability of adequate resources influences service delivery at the county level. | 62 | 4.64 | 0.68 |
| Aggregate Value | 62 | 4.36 | 0.97 |

Source: Field Data (2022)

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The findings of study are in agreement with (Karanja, 2018) whose study was on the effect of financial management on the private sector where the findings were positive and significant. The findings of Karanja concurs with (Caroline, 2018) who concluded that financial management practices include the process of budgeting, good management of public funds and accountability leads to the influence of service delivery and performance.

Service Delivery in Kilifi County Government

This study sought opinions from the respondents on the service delivery in Kilifi County Government. The results indicated as shown in the table 7 below that the majority of the respondents were in agreement that public procurement practices influenced service delivery with (Aggregate mean of 4.36 and standard deviation of 0.97). There was improvement in the effectiveness and efficiency of service delivered at a mean of 4.65 and standard deviation of 0.68. Further the respondents were required to show the extent at which they agree on the timely service deliveries of goods and services procured in Kilifi County, there were slightly improved with an agreement mean of 2.65 and standard deviation of 1.00. The improvement of customer satisfaction was agreed by the respondents at a mean of 3.64 and a standard deviation of 0.84. Finally, the respondents were requested to indicate the level of improvement on the quality of goods and services delivered and the agreement level was at a mean of 4.48 and a standard deviation of 0.80.

Table 7: Descriptive Statistics of Service Delivery

| Statement | N | Mean | SD |
|---|----|------|------|
| The effectiveness and efficiency of procurement practices | 62 | 4.65 | 0.68 |
| Customer satisfaction | 62 | 3.64 | 0.84 |
| Timely deliveries | 62 | 2.65 | 1.00 |
| Quality of services delivered | 62 | 4.48 | 0.80 |
| Aggregate Value | 62 | 3.86 | 0.83 |

Source: Field Data (2022)

These results are in agreement with (AfriCOG, 2016) that procurement practices may impact effectiveness or ineffectiveness of services delivered. Furthermore, there is no part of either the county or national government that doesn't depend on procurement of goods and services. Moreso, this study agrees with (Caroline, 2018) that procurement practices cannot be a meagre clerical routine but be involved in the strategic procurement planning since it has business benefits.

Correlation Analysis of Public Procurement Practices on service delivery in Kilifi County Government

The significance testing in statistics, the P – value shows the level of relation of the independent and the dependent variable. If the significance number found is smaller than the critical value that is as well-known as the probability value (p) which is statistically set at 0.05, then the study concludes that the model is significant by explaining the relationship that would otherwise be considered as non-significant. As shown in the table 4.11 above, the relationship between procurement planning and service delivery was correlated positively and statistically significant (r=.655; p=0.000<0.05), tendering and service delivery (r=.727; p=0.000<0.05), procurement

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policies and service delivery at Kilifi County (r=.791; p=0.000<0.05) while financial management and service delivery was at (r=.671; p=0.000<0.05).

Table 8: Correlation of Public Procurement Practices on service delivery in Kilifi County Government

| Service Delivery | Procurement Planning | Tendering | Procurement Policies | Financial Management |
|------------------|-------------------------|-----------|-------------------------|-------------------------|
| | .655** | .727** | .791** | .671** |

^{**} Correlation is significant at the 0.01 level (2-tailed).

Source: Field Data (2022)

Collinearity Test

The test of collinearity was done and Table 9 shows the results of collinearity statistics as indicated by the variance inflated factor with the four independent variables namely procurement planning (VIF = 1.128), Tendering (VIF = 5.000), Procurement policies (VIF = 1.499) and lastly financial management (VIF = 4.975). All the determinants of procurement practices did not have multicollinearity problems since none of them had VIF close to 10. On the other hand, the influence of each of the forecaster variables on the service delivery was not a matter to other independent variables. The outcomes further had a reinforcement to the suitability of the regression model as shown below.

Table 9: Collinearity Test

| Variable | | TOLERANCE | Variance Inflator Factor |
|---------------------------|----------|-----------|--------------------------|
| Procurement | Planning | 0.886 | 1.128 |
| practice | | | |
| Tendering Practice | | 0.2 | 5.000 |
| Procurement Policies | S | 0.667 | 1.499 |
| Financial Mar | nagement | 0.201 | 4.975 |
| practice | | | |

Source: Field Data (2022)

Regression Model summary for independent variables

To establish the influence of public procurement practices on service delivery in Kilifi County government, Kenya, it was important to have a multiple regression analysis done as shown in the table 10. From the regression analysis model, it can be drawn that, the multiple regression coefficient (R) for all predictors that include Procurement Planning practice, Tendering Practice, Procurement policies and Financial Management practice is 0.904 and R2=0.817. This implies that Procurement planning practice, Tendering Practice, Procurement Policies and Financial Management Practice have a strong positive influence on Service delivery in Kilifi County and explained 81.7% in the variation with the R square value (R²=0.817).

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Table 10: Multiple Regression Model Summary

| | r | , | · · · · · · · · · · · · · · · · · · · | |
|-------|-------------|----------|---------------------------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | 0.904^{a} | 0.817 | 0.804 | 0.38672 |

a. Predictors: (Constant), Procurement Planning practice, Tendering Practice, Procurement policies, Financial Management

The reseacher further had to analyze the Coefficients' Relationship between the independent variables and Service delivery in Kilifi County Government as shown in table 11. The study concluded that independent variables positively significantly influenced the service delivery in Kilifi County with; Procurement planning practice X1 (β =0.433, p< 0.05); Tendering Practice X2 (β =0.001, p< 0.05); Procurement Policies X3 (β =0.326, p< 0.05) and Financial Management Practice X4 (β =0.098, p< 0.05)

Table 11: Coefficients' Relationship between the independent variables and Service delivery in Kilifi County Government

| | ndardized icients | Standardized Coefficients | | | |
|-----------------------------|----------------------|------------------------------|-------|-------|-------|
| | В | Std. Error | Beta | t | Sig. |
| (Constant) | 0.671 | 0.288 | | 0.327 | 0.024 |
| Procurement Planning | 0.433 | 0.060 | 0.573 | 7.166 | 0.000 |
| Tendering Practice | 0.001 | 0.114 | 0.001 | 0.005 | 0.036 |
| Procurement Policies | 0.326 | 0.112 | 0.300 | 2.912 | 0.005 |
| Financial | 0.098 | 0.082 | 0.134 | 1.188 | 0.025 |
| Management | | | | | |

a. Dependent Variable: Service delivery

Source: Field Data (2022)

From table 11, The results in the variable coefficients implies that the variables used in the model are significant in predicting how the services are delivered in Kilifi County Government. From the analysis, it was crystal clear that procurement planning practice had more influence on the service delivery in Kilifi County with β 1=0.433 with sig. value of p=0.000<0.05. This denoted that for every 1 unit increase in the procurement planning practice led to 0.433 increase in better service delivery in Kilifi County Government. Also Multi regression coefficients indicated that procurement policies and service delivery were positive and statistically substantial at β 3=0.326 with sig. value of p=0.000<0.05 Financial management practice had a small positive significant influence on the service delivery in Kilifi County with β 4 = 0.134 with sig. value of p=0.025<0.05 while Tendering practice indicated a very weak significant level of β 2=0.001, with sig. value of p=0.024<0.05

Presentation of the regression Model:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$

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Where Y = Service Delivery in Kilifi County; β 0= Constant Term β 1, β 2, β 3, β 4 = Coefficients.; X1= Procurement planning practice, X2= Tendering Practice; X3= Procurement Policies; X4= Financial Management Practice and ϵ = Error Term

 $\beta 0=$ **0.671**; $\beta 1=$ **0.433**, $\beta 2=$ **0.001**, and $\beta 3=$ **-0.326** and $\beta 4=$ **0.134**; Hence the general regression model is: $Y=0.671+0.433X1+0.001X2+0.326X3+0.134X4+\epsilon$

SUMMARY OF THE FINDINGS.

The multiple regression analysis established that that independent variables positively significantly influenced the service delivery in Kilifi County with; Procurement planning practice X1 (β =0.433, p<0.05); Tendering Practice X2 (β =0.001, p<0.05); Procurement Policies X3 (β =0.326, p<0.05) and Financial Management Practice X4 (β =0.098, p<0.05). This implied that Procurement planning practice had 43.3% Influence on service delivery; Tendering Practice had 1% Influence; Procurement Policies had 32.6% and Financial Management Practice had 9.8% Influence on service delivery. The results further showed that the predictors variables that included Procurement planning practice, Tendering Practice, Procurement Policy and Financial Management Practice explained 81.7% in the variation of service delivery in Kilifi County with the R square value (R2=0.817).

The collinearity statistics as indicated by the variance inflated factor with the four independent variables namely procurement planning practice (VIF = 1.128), Tendering Practice (VIF = 5.000), Procurement policies (VIF = 1.499) and lastly financial management practice (VIF = 4.975). All the determinants of procurement practices did not have multicollinearity problems since none of them had VIF close to 10. On the other hand, the influence of each of the forecaster variables on the service delivery was not a matter to other independent variables. The outcomes further had reinforcement to the suitability of the regression model.

The significance testing in statistics, the P – value shows the level of relation of the independent and the dependent variable. If the significance number found is smaller than the critical value that is as well-known as the probability value (p) which is statistically set at 0.05, then the study concludes that the model is significant by explaining the relationship that would otherwise be considered as non-significant. Correlation analysis showed that there is significant positive relationship between public procurement practices and service delivery in Kilifi County. Procurement planning correlated positively and statistically with (r=.655; p=0.000<0.05), Tendering practice and service delivery with (r=.727; p=0.000<0.05); Procurement policies and service delivery with (r=.671; p=0.000<0.05).

CONCLUSION

The findings of this study concluded that public procurement practices that included Procurement planning practice; Tendering Practice; Procurement Policies and Financial Management Practice had positive and significant influence on the service delivery in Kilifi county government. The

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first objective of the study was the influence of procurement planning on the service delivery in Kilifi County Government which was positive and significantly related. Public entities that do identification of needs and assessment on all goods and services as well as strictly adhering to the delivery schedules, involvement of all stakeholders on procurement functions have higher chances of delivering efficient, quality and effective services. The stakeholder's theory states that all the stakeholders should be involved in all matters and the organizational mission should be to manage their interest, viewpoints and needs.

Further, the study concluded that the process of tendering on the delivery of services was statistically positive but significantly inverse on effective services. The county government that follows all the legal processes of tendering duly and appropriately select contractors and suppliers is guaranteed to offer efficient and quality services to the members of public. Openness, fairness, transparency and integrity are vital components of tendering process.

The third objective of the study concluded that procurement policies on delivery of service in the County Government of Kilifi were positive and significantly effective. The principal-agency theory stated that the decisions made should be undertaken by the management on behalf of the company owners (stakeholders) under the powers entrusted to them. For the principal operations to be efficient the decisions made and agent acts should have a relationship which is key to service delivery. The county that's follows the right procurement policies under the high level of professionalism, there is guaranteed effectiveness and efficiency in terms of service delivery.

The final objective of this study was the influence of financial management on service delivery in Kilifi County Government. The outcome of the study was found to be positive and inversely significant. The contingency theory states that the organization can move from one level to the other at a pace by giving guidelines for the steady change till when it gets to the maximum level equal to the performance of all fit points of the organization. Financial management is one of the different levels of fit. Receipt of funds in a timely manner, allocation of budgets for various functions and approval by the Members of County Assembly affects the procurement activities at the County level. The study further concluded that poor management of public funds includes incurring senseless expenditure and failure to keep records which had negative influence on the service delivery. The county that has adequate resources should display high level of accountability in management of the funds allocated from the national government. When this is done, the procured goods and services are likely to be delivered on a timely, effective and efficient manner to its citizens.

Recommendations

The study recommends that the county leadership should come up with relevant tendering policies to ensure openness, integrity and transparency in all tendering process. There should be strong financial management mechanisms to avoid wastage during procurement functions and processes.

In addition, all county stakeholders should be involved in the procurement process for the purpose of ensuring timely service delivery in line with the procurement specifications

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References

- AfriCOG. (2016). Factors Influencing Procurement Practices in Government Ministries in Kenya. *The Journal of Strategic Business and Change Management*, 5(2), 2033 2059.
- Alexander. (2019). Procurement Planning and Accountability in County Governments.
- Amos, E. &. (2018). An analysis of the relation between employee-organization value congruence and employee attitudes. Journal of Psychology, 1(2), 620-632.
- Athumani., N. (2015). Assessment of effectiveness of tendering Process in the public sector, the case of ministry Of health and social welfare. Dar es Salaam-Tanzania: Mzumbe University.
- Augustine, A. N. (2019). Effect of inventory management on organizational effectiveness. *European Management Journal*, 3(8), 52-70.
- Basheka, B. C. (2020). Determinants of unethical public procurement in local government systems of Uganda. *International Journal of Procurement Management*, 3(1), 81-94.
- Beatrice, N. A. (2014). Factors influencing effectiveness in Tendering process in public sector, The case of Nyeri County, Kenya. Journal of Business Management, 1(2).
- Caldwell, N. R. (2019). Procuring complex performance in construction: London Hearthrow Terminal 5 and private finance initiative Hospital. Journal of purchasing and supply management, 28-41.
- Caroline, C. (2018). The effectiveness of Procurement Practices on Performance of County Governments in Kenya: A Study of Kericho County Government. Kisii University Unpublished Master in Procurement project, 12-22.
- Christopher, C. (2020). Logistics and supply chain management: strategies for reducing cost and improving service. London: Financial Times Pitman Publishing.
- Croom & Johnston. (2013). The Impact of User-Perceived e-Procurement Quality on System and Contract Compliance. International Journal of Operations & Production Management,, 274-296.
- Davis, M. J. (2014). Procurement practices influencing service delivery: A case study of Kenya Power. European Journal of Logistics Purchasing and Supply Chain Management, 79-92.
- Freeman, E. (1999). Strategic Management: A Stakeholder Approach. Boston: Pitman Publishing. Government., K. C. (2022). Current Status of employees in County. Kilifi.
- Hill, C. (2017). Stakeholder-Agency Theory. Journal of Management Studies, 29(2), 131-154. Joan, W. (1958). Contigency Theory.
- Johnston., C. &. (2014). The Impact of User-Perceived e-Procurement Quality on System and Contract Compliance. International Journal of Operations & Production Management, 274-296.
- Juliana, A. M. (2013). Effectiveness of Procurement Planning on Service Delivery in public sector: A case study of Tanga City Council. Tanga: University of Daresalam.
- Juliana, A. M. (2020). Effectiveness of procurement planning on service delivery in public sector: A case study of Tanga city council. Tanga: University of Dar.
- Kabaj, O. (2019). The Challenges of African Development. London: Oxford University Press.
- Kakwezi, &. N. (2020). Procurement Processes and Performance Efficiency and Kenya. . University of Nairobi Unpublished MBA Project,, 30-33.

Print ISSN: 2054-0930 (Print)

Online ISSN: 2054-0949 (Online)

- Karanja, M. &. (2018). Influence of procurement practices on organization performance in the private sector in Kenya: A case study of Guaranty Trust Bank Kenya Ltd. International Journal of Business & Law Research; 3(2), 44-60.
- Kenard. (2017). Sustainable procurement, Commercial Management, Shaping and Change. Ed Journal of Public Procurement., 28-37.
- Kiage. (2013). Factors Affecting Procurement Performance. A case of Ministry of Energy. International Journal of Business and Commerce, 3(1), 54-70.
- Kimani, W. (2019). Factors Influencing Procurement Practices in Public Secondary Schools in Mathioya. Nairobi: University of Nairobi Unpublished MBA Project.
- Kiruja, B. (2014). Procurement Methods and Procurement Planning Among Paratatals under National Treasury.
- Kothari, C. R. (2004). Research Methodology: Methods & Techniques. . New Delhi India:: New Age International Publishers.
- Lewa, P. (2017). Management and Organization of Public Procurement in Kenya: A review of Proposed Changes. Nairobi: IPAR.
- Lisa, I. (2010). Conceptual Framework. Journal of Management and Organization, 19(7), 702-706. Lysons, K. &. (2013). Purchasing and Supplies Chain Management.
- Mokaya, K. (2013). University of Nairobi Press. Procurement Journal, Issue 0001.
- Mugenda, O. M. (2013). Research Methods: Qualitative and Quantitative Approaches. Nairobi: ACTS Press.
- Nichols, P. (2012). Regulating Transnational Bribery in Times of Globalization and Fragmentation. The Yale Journal of Internal law,, 257-304.
- Ocharo, K. J. (2019). Factors affecting procurement performance: A case of Ministry of Energy . International Journal of Business and Commerce, 54-70.
- Ochieng, F. (2015). Factors Influencing Management of public Projects A Case of Kericho County. International Journal of Science and Technology, 2(1).
- Ogolla, &. K. (2018). Project Planning and Implimentation in County Governments. Nairobi.
- Ogwel, T. I. (2020). Factors Influencing Performance of Public Procurement Function in Tranzoia County Kenya. International Journal of Recent Research in Commerce Economy and Management, 3(2), 56-70.
- Parasuraman, A. B. (2016). The behavioural consequences of service quality, Financial Times, Procurement policy manual (2009). IT Procurement planning quality, Financial Times, Procurement policy manual (2019). IT Procurement planning and strategic sourcing. Viginia: Viginia information technologies Agency Sass.
- Patrick, O. J. (2018). Factors Affecting Procurement Planning In Public Secondary Schools in Kenya: A Case Study of Secondary Schools in Migori County. Imperial Journal of Interdisciplinary Research (IJIR), 326 338.
- Pillary, S. (2017). Corruption the Challenge to Good Governance: a South African Perspective,. Melbourne, Australia.
- PPDA. (2005). Public Procurement and Disposal Act (2005). Nairobi: Government Press.
- PPDA. (2015). Public Procurement and Assest Disposal Act (2015). Nairobi: Nairobi Government Press.
- Raymond, J. (2018). Benchmarking in public Procurement. . An International Journal, 782 793.

Print ISSN: 2054-0930 (Print)

Online ISSN: 2054-0949 (Online)

- Republic of Kenya.,. (2017). Public Procurement, Regulations. Nairobi: Government Press.
- Rono, T. K. (2017). Effects of Procurement Practices on Organizational Performance in Public Sector: A case of East African Portland Cement Company Ltd. International Journal of Business and Commerce, 48-61.
- Rotich. (2019). Effect of Professionalism on Procurement performance. Nairobi: University of Nairobi Unpublished Thesis.
- Shileswa, E. A. (2017). Effect of Procurement Practices on Procurement Performance of Public Sugar Manufacturing Firms in Western Kenya. *International Journal of Mnagement Research & Review.*, 7(4), 25-39.
- Sollish, F. &. (2018). The procurement and supply managers' desk reference (2nd Ed. ed.). New Jersey: Wiley & Sons.
- Thai, K. V. (2018). International Handbook of Public Procurement. Ontario, Canada;: CRC Press. Thomson. (2017). Introduction To Supply chain Management: Analysis Strategy, planning. . *Journal Purchasing and Supply Management*.
- Trochim W.K. (2016). Research Methods Knowledge Base. Retrieved from www.dissertation-statistics.com/instrument-validity.html on 9th January 2022 at 18:36PM.
- Waddell, S. (2019). Complementary Resource: the win win rationale for partnership with NGOs. Wanyonyi, &. M. (2015). Factors Affecting Performance of Procurement Functioning Among Public Technical Training Institutions in Kisumu County, Kenya. *International Journal of Economics*, *Commerce and Management*, 3(5), 58-76.