

Evaluation of Procurement Processes and its Operational Performance in the Public Sector of Ghana: A Case Study of Komfo Anokye Teaching Hospital and Kumasi Polytechnic.

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Abstract

The purpose of this study was to evaluate purchasing processes on performance in the public sector in Ghana. It was to find out if public sector purchasing processes help in achieving high performance by purchasing function, the challenges faced by public institutions with regards to purchasing processes and the relationship that exists between purchasing processes and performance at Kumasi Polytechnic and Komfo Anokye Teaching Hospital. The study obtained information from forty five respondents through the use of questionnaires and interviews. The results indicated that, purchasing processes play a vital role in the performance of organizations and that both institution rely or use the public procurement procedure in the purchase of materials. The study revealed that procurement processes are characterized with lots of challenges.

Among the recommendations made were that the Public Procurement Act 200, (Act 663) of Ghana be reviewed as the current modes are rigid and allows no flexibility, more so institutions and government are encouraged to embrace e-procurement which if adopted would be faster, less costly and easier to purchase materials.

Keywords: Procurement, Procurement Processes, Operational Performance, Public Sector

1.0 Background of Study

Purchasing function is important part of doing business in today's competitive environment. As a result of this development purchasing function has now moved from product-centered to a performance-centered. This trend has called for the process to be evaluated in order to achieve the performance-centeredness in the public sector (Wan Lu, 2007). With this realization, many public sector institutions and for that matter governments in many countries have invested substantial funds to restructure public sector purchasing or procurement processes to improve performance in terms of quality services and savings. Weele (2010) argues in support of this current development by saying that many organizations have now turned to improve purchasing processes as mechanism for cost cutting and savings to remain in business. Klemencic (2006) also support the above assertion by stating that, a large number of public sector institutions have made large investment to streamline their purchasing activities and processes in terms of training and infrastructure in improving customer satisfaction and also increase their internal productivity.

In (2003), the government of Ghana passed the Public Procurement Act 663 to streamline procurement processes to achieve value for money that will be spend by all public sector institutions (Public Procurement Authority, 2003). The amount of money that goes into preparation and execution of purchasing of material and service requirements is quite substantial. In Ghana, public procurement accounts for 50-70% of the national budget (after personal emoluments), 14% of GDP, 24% of total imports, (World Bank CPAR, 2003). Thai (2009) has also contributed to this by arguing that, Public procurement consumes a substantial amount of public money. In Malawi, it was estimated in 2005 that public procurement constituted 40 percent of the total expenditure, while in Uganda; it was at 70 percent (Development Assistance Committee, OECD, 2005).

The Public Procurement Act of Ghana has prescribed processes by which all purchases with public funds should be conducted. Do these processes help purchasing perform to achieve its goals and objectives to meet operational requirements. Handfield (2003) has also noted that, many organizations are beginning to re-evaluate their purchasing processes to identify the new tools that will help the function to perform and impact on its performance due to substantial amount of public funds that goes into it.

Effective and proficient procurement processes can yield good performance for purchasing in the public sector institutions in terms of lead-time reduction, savings, and high quality of goods and continuity of supply, stakeholder's satisfaction and profit growth of public institutions in Ghana.

In spite of the above benefits to be derived from proficient procurement processes, some public sector institutions in Ghana are facing challenges with the existing purchasing processes.

1.1 Research Problem

The current public sector purchasing processes are not yielding the desired results in terms of meeting operational requirements of public sector institutions on time as a result of the bureaucratic nature of the processes involved and impacts negatively on purchasing performance.

1.2 Research Objective

The research was set to achieve the following objectives:

- To evaluate public sector purchasing processes.

- To evaluate purchasing processes on performance at Kumasi Polytechnic and Komfo Anokye Teaching Hospital.

1.3 Research Questions

The research sought to address the following research questions:

- Can public sector purchasing process help in achieving high performance by purchasing function?
- What are the challenges faced by public institutions with regards to purchasing processes?
- What purchasing process can Kumasi Polytechnic and Komfo Anokye Teaching Hospital adopt to improve purchasing performance?
- What relationship exists between purchasing processes and performance at Kumasi Polytechnic and Komfo Anokye Teaching Hospital?

1.4 Justification and Significance of the Study

The research was aimed at studying into purchasing processes and performance in the public sector in Ghana. This research identified the key purchasing processes and methods that will help public sector institutions obtain their material requirements on time and improve upon purchasing performance.

This research will assist in developing theoretical framework to provide a reference source for academic purposes for students, lecturers and other researchers who may conduct future research into purchasing processes and performance. This research would also be useful to the case study institutions and other organizations that may need reference guide to help improve or streamline their purchasing processes and performance.

In addition, the internal and external customers of purchasing will be familiar with the procurement processes for effective collaboration in meeting material requirements of the institution. Lastly, it will service as a guide for policy makers in any future decision and also contribute to the body of knowledge.

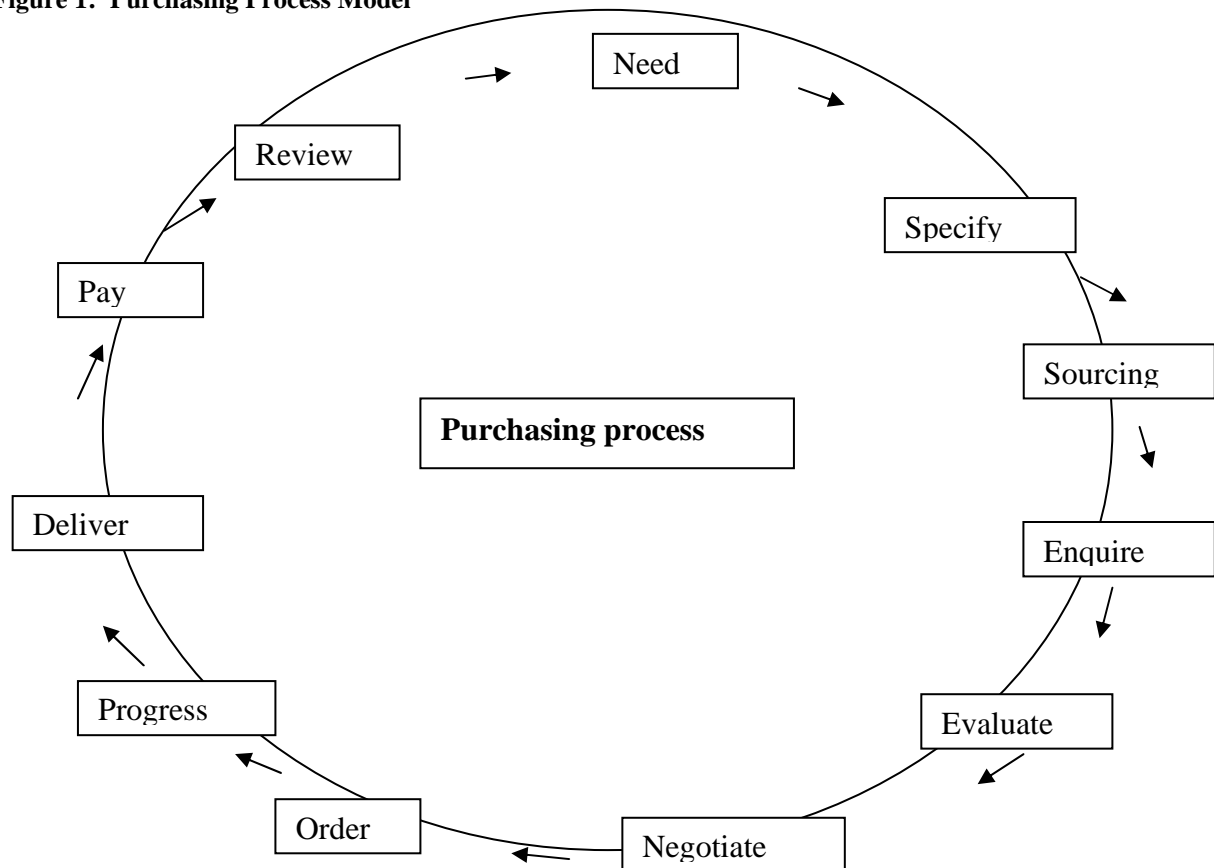
2.0 Literature Review

2.1 Definition of Purchasing Process

Lysons and Farrington (2006) defined a process as a set of sub processes or stages focused on achieving an output. Purchasing process is a cycle or chain that shows the activities that purchasing goes through in obtaining a given need for operational and strategic purposes. Wan Lu (2007) argues that process consist of flow charting and blue print to describe a process in picture, using symbols with arrow lines connecting each operational step. (Weele, 2010: p29) has described and grouped the process of purchasing into six distinct stages as specification, select supplier, give contract or ordering, expediting and evaluation of the entire purchasing process. (Monczka, Trent & Handfield, 2003), argue in the same line as Weele, but also presented the purchasing process as a cycle with five distinct stages instead of the six recommended by Weele. These stages will change according to the nature of purchase and the individual organization in question. This means that, if the product is a straight re-buy, modified re-buy and a new task all together will determine the stages that will be involved or chosen in obtaining that particular need(s) from an identified and evaluated source. (Carter & Kirby, 2006 :p6) describe the process of purchasing as the overall sequence of events that sum up the purchasing activity from identification of need to payment of invoices in respect of the goods or service purchased to satisfy a given need. Emmett & Crocker (2008: p 4) suggest that, procurement or purchasing process has ten stages from need identification to payment of respective purchasing. This is so because most organizations emerge some stages as one in the process to reduce the lead time and other administrative cost. For instance, some organizations or corporate institutions emerge the stage of expediting and evaluation as one stage and responsibility. Based on these facts, there is no unique number of stages of the purchasing process. Most writers in this discipline are all in agreement of the fact that, some of the stages will not feature in every purchase. Some of these stages will be omitted if the order is a repeat order. For instance source identification and selection will be taken out if these source have be pre-qualified initially to assess their capabilities as is been done in some public sector institutions. (Lysons and Gillingham, 2003) & (Weele, 2010) introduced a modern way of conducting purchasing activity by the use of Electronic means (e-Procurement). These writers suggested that, the lengthy process can be reduced or shorten through the use of electronic procurement. In order to identify the activities in which purchasing process goes through, the process can be seen as a cycle as shown in the figure below.

2.2 Purchasing Process Model

Figure 1: Purchasing Process Model



Source: Emmert and Crocker (2008)

Baily (2005) is however of the view that the above purchasing cycle does not recognize the strategic contribution by modern purchasing by showing only the tactical aspect of the function.

2.3 Electronic Procurement

In the last forty years, both private and public sector organizations have been utilizing information technology system in an attempt to streamline and also automate their purchasing and other processes; it is only recently that e-procurement systems have recorded the needed attention it deserves as a means of enhancing the purchasing processes (Kishor 2006).

2.4 Evaluation of Purchasing Process

Controlling the performance of the purchasing function and ensuring its efficiency and effectiveness is essential to the management of the procurement process. It is vital to evaluate how well the procurement process has gone, identify any weaknesses or problems and agree actions to prevent similar problems in the future. In Ghana, public procurement or purchasing process is required by law Act 663, (2003) to conduct formal procurement evaluation or audit to assess its performance.

2.5 Key Performance Indicators of Purchasing Process

2.5.1 Definition of Key Performance Indicators

Key performance indicators are measurements or metrics that will help in accessing the performance of purchasing to its customers. Bryan and Oliver (2009) defined KPI as selected performance indicators that are going to be applied in measuring the performance of the process or function. They also serve as a tool in identifying problems and solution to improve on performance of the purchasing process or function.

2.6 Relationship between Purchasing Processes on Performance

Purchasing processes are sequence of activities that purchasing conducts its activities in buying goods and services to support the organisation operations (Weele 2010, Monnczka, Trent & Handfield 2002). Performance of purchasing is the direct or indirect output of the processes based on the set objectives and goals of purchasing and the overall expectation and satisfaction of customers (Sollish & Semanik 2007). The processes start from need identification to payment and review of the entire process (Emmert & Crocker 2008, Baily et al 2005, Burt, Dobler & Starling 2006). The processes have direct impact on the performance target set. If the processes are very rigid and quite difficult to amend to respond to changes in customers' requirements; customers will never be satisfied of the kind of services the function will perform. The Public Procurement of Act of Ghana 663,

(2003), has stipulated prescribed processes a particular amount budgeted for should follow already determined sub-processes in buying a product. These processes will determine the lead time, quality, and delivery time and product availability rate which are the key performance of purchasing function.

3.0 Research Methodology

The researchers used multiple case studies as the strategy for the research. The target population of the research includes: procurement and stores officers of Kumasi Polytechnic and Komfo Anokye Teaching Hospital. The sample frame was therefore the entire procurement unit and stores department of the institution who are directly involved in the purchasing processes.

The researchers employed the cross-sectional survey method. The research benefited from two main data sources; primary and secondary. Primary data was collected through structured questionnaire and personal interviews. The secondary data on the other hand was used to help bring a general understanding to the research. Qualitative data was gathered and used as part of the research. The research approach was descriptive and explanatory study. Also, data was solicited from text books and relevant academy journals which relate to the research topic mainly for the literature review.

The researcher used frequencies to present the descriptive data and cross tabulation to analyze the relationship between the variables i.e. purchasing processes and performance and the other variable indicated in the research objectives.

3.1 Limitations of the Study

The research scope should have covered the entire public sector institutions in Ghana to give adequate grounds for generalization of the research findings but due to limited time frame the research was limited to Kumasi Polytechnic and Komfo Anokye Teaching Hospital and also covered purchasing processes and performance on goods and excluded works and services.

4.0 Data Analysis, Presentation and Interpretation

4.1 Demographic Data

On demographic data, questions were asked on gender and job title held by respondents.

From the population size of 45, the number of respondents from Kumasi Polytechnic was 20 while KATH had 25 respondents. The disparity in number was realized because the supply chain unit of KATH is larger than Kumasi Polytechnic while at the same time the research wanted to find the views of both institutions in relation to the research topic.

In dealing with gender, the respondents from KATH had six females with 19 males. Kumasi Polytechnic had 4 females with 16 males. Table 1 throws more light on the gender distribution of respondents.

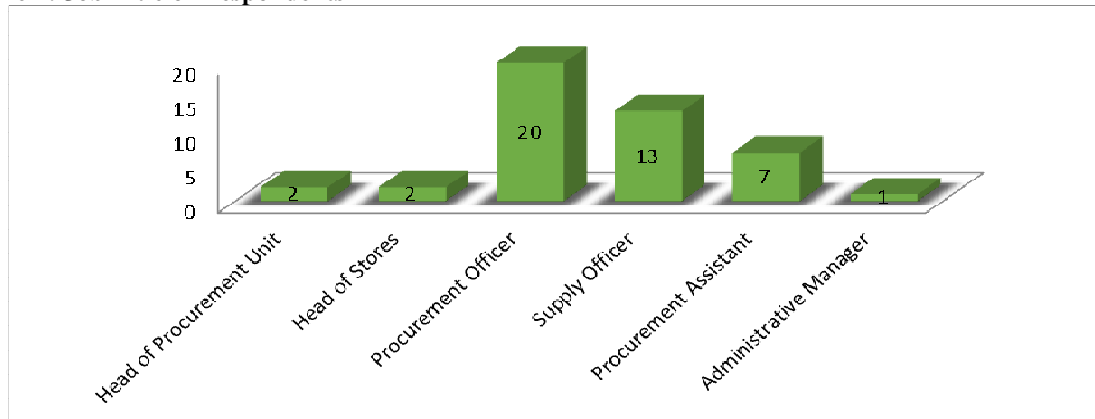
Table 1: Distribution of Respondents by Gender

Gender	Frequency	Percentage %
Males	35	78
Females	10	22
Total	45	100

Source: Field Survey, 2012

Table 1 shows that 35 of respondents representing 78% of participants were males while 10 respondents representing 22% were females. This clearly shows that there were more male participants than females in this survey and it may be as a result of the institutions selected having more male employees than females.

Figure 1: Job Title of Respondents



Source: Field Survey, 2012

4.2 Research Question One: Can public sector purchasing process help in achieving high performance?

This was to find out from respondents if the public sector purchasing processes help in achieving high performance, answers from respondents are discussed below;

In an interview with the procurement superintendent of KATH, he outlined that the procurement process of the hospital is as follows; that the hospital follows the public procurement process in its procurement activities. The process starts from need identification then users submit their input for the procurement plan. After approval, the procurement unit source through advertisement or request for quotation based on the threshold. Evaluations of tenders follow to the final stage of supply to the stores. He also emphasized that the bureaucratic of the process does not help in achieving high performance however, competitive prices most of the time are achieved as one of the key performance indicator.

The Chief Procurement Assistant of Kumasi Polytechnic also shared a similar view, that the school follows the public procurement process in its procurement activities. The process starts from need identification by user departments which serve as input for the procurement plan. After approval, the procurement department prepares tender documents and source for potential suppliers to supply. Tenders are evaluated and recommendations sent to Entity Tender Committee for approval. Contracts are awarded for the supply of materials to the stores for onward supply to the user departments. He added that the process is very cumbersome and does up to the lead time which creates occasional shortage and affects performance of purchasing.

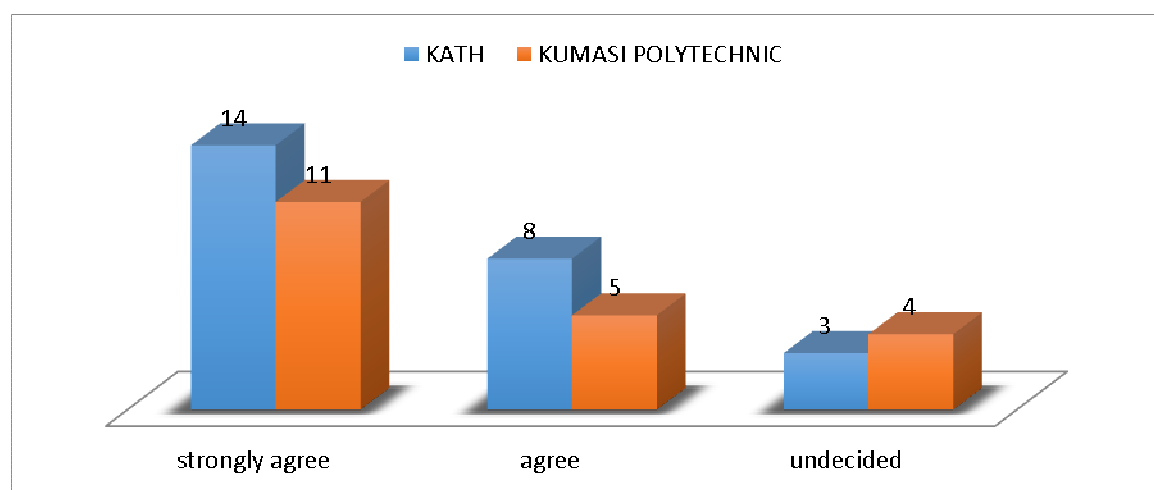
4.2.1 Quality of Materials Procured Depends on Purchase or Procurement Process

This was to find out from respondents if the procurement process helps in achieving quality in materials purchased or procured.

Out of 20 respondents from Kumasi Polytechnic, 11 strongly agreed that quality of materials procured depended on the procurement process adopted by the school, five respondents agreed with the statement while four respondents were undecided as to whether quality materials procured depended on the procurement process.

Similarly, respondents from KATH also shared this opinion, out of 25 respondents 14 strongly agreed with the statement that the quality of materials procured depended on the procurement processes, eight agree with the statement while three respondents were undecided. Figure 2 explains the response of both respondents from KATH and Kumasi Polytechnic.

Figure 2: Quality of Materials Purchased Depends on Purchase or Procurement Process



Source: Field Survey, 2012

From figure 2, it is realized the majority of 25 respondents from 45 strongly agreed with the statement that quality of materials purchased depended on the procurement processes adopted by both institutions, while seven respondents however were undecided with their response to the statement.

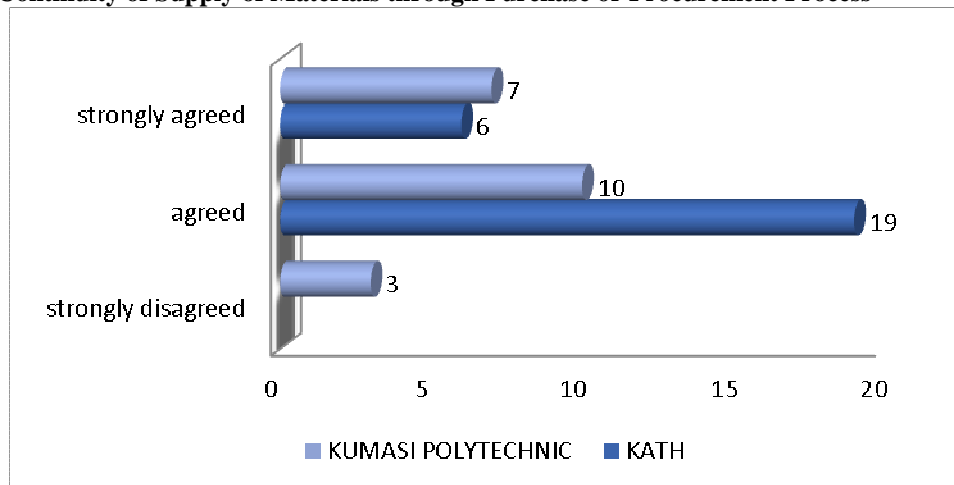
4.2.2 Continuity of Supply of Materials

Respondents were asked if efficient procurement processes ensures continuity of supply of materials in their selected institutions, responses are explained as follows;

Three respondents from Kumasi Polytechnic strongly disagreed with the statement, 10 agreed with the statement while 7 respondents strongly agreed with the statement that efficient procurement process ensures continuity of supply of materials in their institution.

From KATH, 19 respondents agreed with the statement while 6 respondents strongly agreed with the statement efficient procurement process ensures continuity of supply of materials in their institution. Figure 3 graphically explains further.

Figure 3: Continuity of Supply of Materials through Purchase or Procurement Process



Source: Field Survey, 2012

It is realized from figure 3 that 29 constituting more than half of the sampled respondents agreed with the statement that efficient procurement process ensures continuity of supply of materials in their selected institutions. 13 respondents agreed with the statement while 3 respondents however strongly disagreed with statement.

4.3 Research Question Two: What are the Challenges Faced by Public Institutions with regards to Purchasing Processes?

This was to find out from respondents the challenges public institutions go through with regards to purchase processes in the procurement of materials in the administration of their selected institutions.

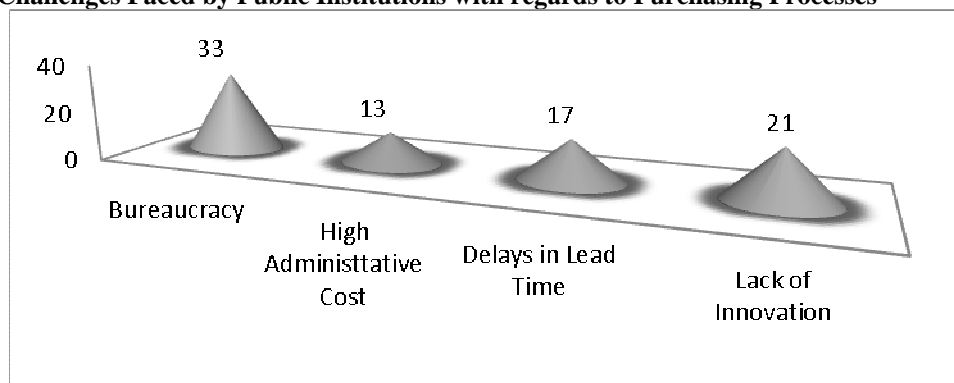
Out of 45 respondents, 33 were of the view that a major challenge faced by public institutions with regards to purchasing process is bureaucracy, respondents explained the process of getting things done had to go through lengthy processes before approval or disapproval which often leads to delays and inefficiency.

13 respondents also explained that high administrative cost is also a challenge to the purchasing process as the amount of time and funds spent are to the detriment of the institutions involved.

17 respondents reiterated that the procurement lead time is always long or delayed, respondents explained that internal administrative procedure coupled with suppliers' excuses helps in the delay of procurement lead time.

21 respondents were of the opinion that public procurement process lacked innovations. Respondents explained that the current processes is time wasting and it was about time government and stakeholders adjusted to new ways of procuring items. Figure 4 graphically explains further.

Figure 4: Challenges Faced by Public Institutions with regards to Purchasing Processes



Source: Field Survey, 2012

Figure 4 shows that the major challenge facing the procurement process is bureaucracy. Bureaucratic tendencies often leads to delays in the decision making process, the next major challenge is lack of innovation in the purchasing process as the current procedures do not allow changes to embrace innovative methods.

Moreover is realized that the numbers of responses is more than the sampled size, this is as a result of respondents choosing more than one response in relation to the question asked.

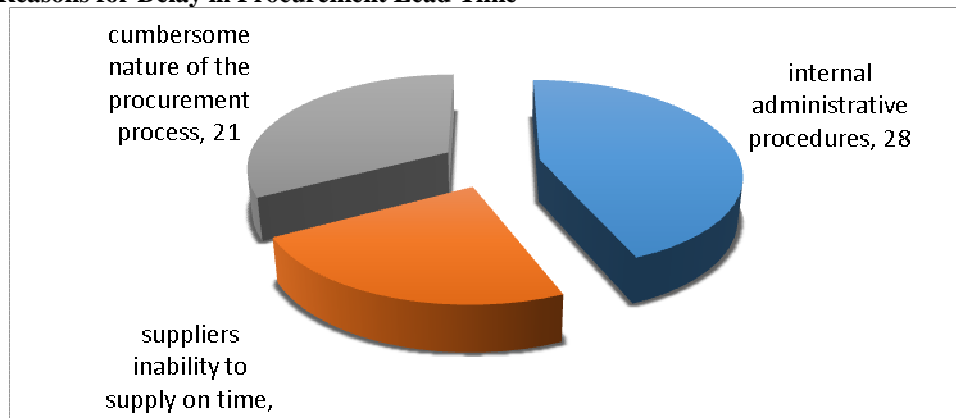
4.3.1 Reasons for Delay in Procurement Lead Time

The researcher wanted to find out the reasons why the procurement lead time in selected institution is always long or delayed.

28 respondents out of 45 were of the opinion that internal administrative procedures always accounted for the delays in the procurement lead time.

Suppliers' inability to supply on time is also a factor or reason for the delay in lead time, 15 respondents shared this view while 21 respondents agreed that the cumbersome nature of the procurement process also contributed to the delay in lead time. Figure 5 further explains.

Figure 5: Reasons for Delay in Procurement Lead Time



Source: Field Survey, 2012

4.4 Research Question 3: What purchasing processes can Kumasi Polytechnic and Komfo Anokye Teaching Hospital adopt to improve purchasing performance?

This was to find out from respondents what purchasing processes could be used once the current one is faced with lots of challenges.

4.4.1 The Use of Electronic Procurement Facility

This was to find out from respondents if their selected institutions relied on electronic procurement or e-procurement.

Information technology system is an attempt to streamline and also automate purchasing and other processes; it is only recently that e-procurement systems have recorded the needed attention it deserved as a means of enhancing the purchasing processes (Kishor 2006). However, out of 45 respondents from both public institutions none is using e-procurement or electronic procurement technology. This clearly shows that the purchasing process of both institutions though fully aware of the lapses in their current process would continue to be delayed until such processes are properly streamlined.

4.5 Research Question 4: What Relationship exists between Purchasing Processes and Performance at Kumasi Polytechnic and Komfo Anokye Teaching Hospital?

This section was to find out from respondents the relationship that exists between purchasing processes and performance at the selected institutions.

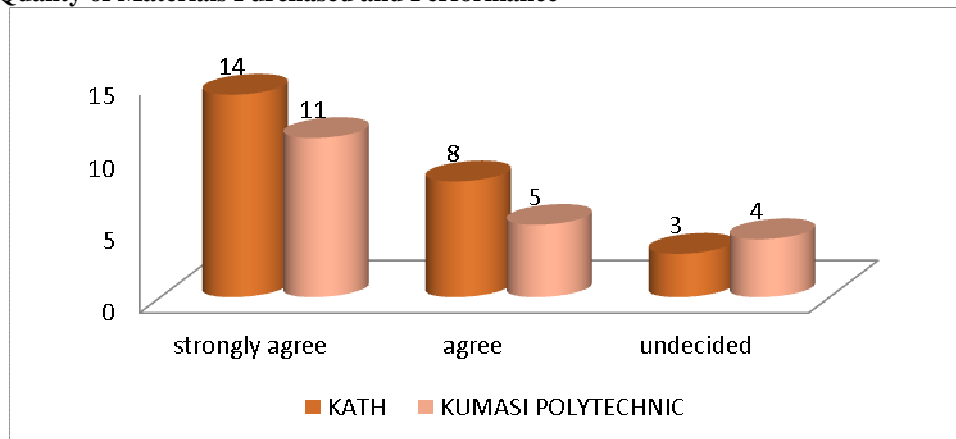
4.5.1 Quality of Materials Purchased and Performance

The researcher wanted to find out from respondents if the quality of materials purchased through the procurement processes had an impact on performance.

Out of 20 respondents from Kumasi Polytechnic, 11 strongly agreed that quality materials are obtained with the help of the procurement process and has also help improved performance as the materials supplied are good in terms of quality and meet the intended purpose put of the Polytechnic, five respondents agreed with the statement that if materials were available and are of good quality it makes work easy meanwhile four respondents were undecided as to whether quality materials produced enhanced performance or had any relations with performance.

Respondents from KATH also shared this opinion, out of 25 respondents 14 strongly agreed with the statement that the quality of materials due to the procurement processes had great relationship or impact on performance, eight also agreed with the statement that if materials are of great quality it reduces workload and burden thereby more is produced or done while three respondents were undecided. Figure 6 explains the response of both respondents from KATH and Kumasi Polytechnic.

Figure 6: Quality of Materials Purchased and Performance



Source: Field Survey, 2012

Figure 6 shows that 25 respondents from 45 strongly agreed with the statement that quality of materials produced by the procurement processes had great impact on performance, while seven respondents however were undecided with their response to the statement.

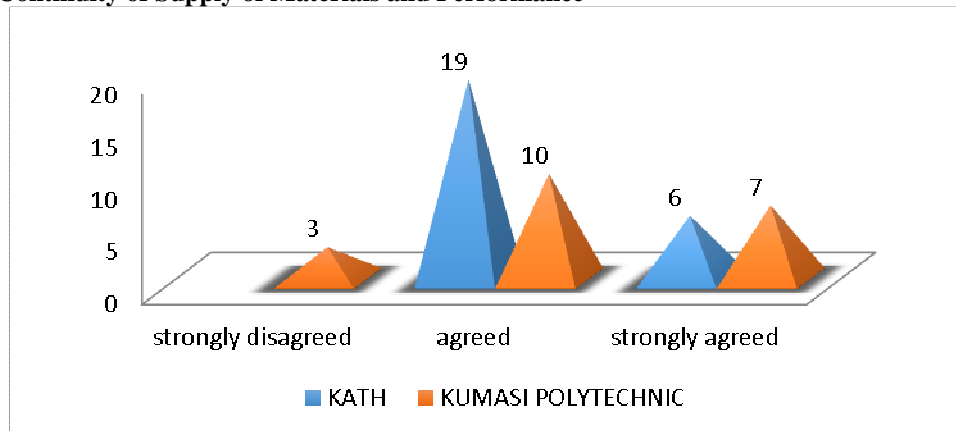
4.5.2 Continuity of Supply of Materials and Performance

This was to find out from respondents if the efficient procurement process which ensures continuity of materials had any relationship with performance.

Three respondents from Kumasi Polytechnic strongly disagreed with the statement, 10 agreed with the statement while 7 respondents strongly agreed with the statement that efficient procurement process which ensures continuity of supply of materials impacted on the performance of purchasing function.

19 respondents from KATH agreed with statement while 6 respondents strongly agreed with the statement that continuity of supply of materials enhanced performance. Figure 7 graphically explains further.

Figure 7: Continuity of Supply of Materials and Performance



Source: Field Survey, 2012

Figure 7 shows that about 42 respondents agreed with the statement that continuity of supply of materials helped improve performance in selected institutions.

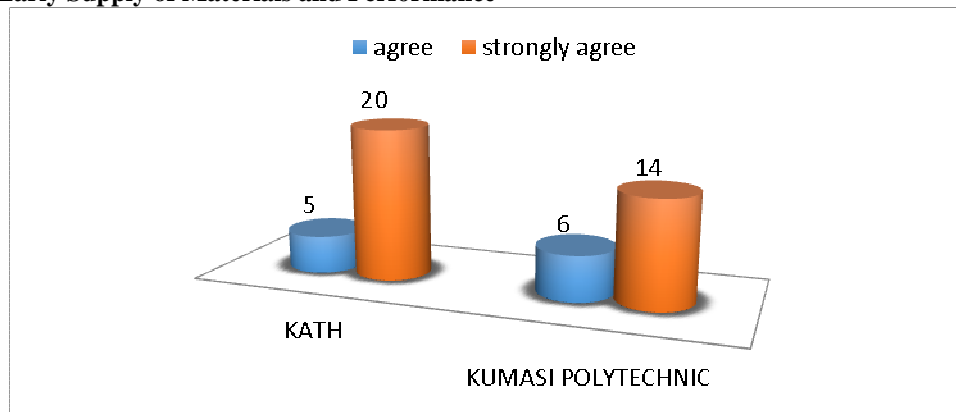
4.5.3 Early Delivery of Materials and Performance

This section was to find out from respondents if early delivery of materials which is vital in the procurement process had an impact on performance, responses are as follows;

Six respondents from Kumasi Polytechnic agreed with the statement that early delivery or supply of materials helped increased performance in the institution, the majority of 14 respondents strongly agreed with the statement that if materials are readily available it helps increase performance in their institutions while delays stall performance.

Five respondents from KATH also agreed with the statement while the majority of 20 strongly agreed with the statement. Figure 8 illustrates the discussions.

Figure 8: Early Supply of Materials and Performance



Source: Field Survey, 2012

Figure 8 shows that the majority of respondents strongly agreed with the statement that early delivery or supply of materials ensured an increase in performance.

In an interview with the Procurement Superintendent of KATH in relation to the above statement, he stated that there is a relationship between processes and performance in the sense that if the processes are very efficient and robust, it will respond to users' needs on time, with the right quality, cost and quantity. With this efficiency, purchasing is likely to perform on a higher scale. While the Chief Procurement Assistant of Kumasi Polytechnic stated that the processes if organized well help to obtain quality and cheaper cost of goods which are some of the major key performance indicators of purchasing.

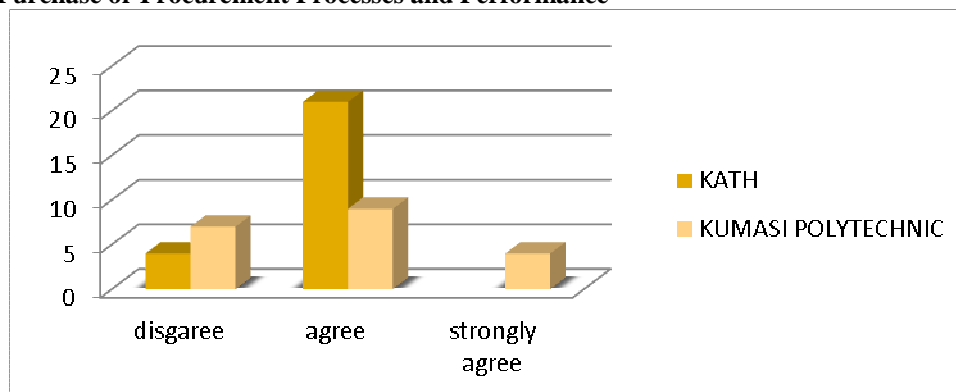
4.5.4 Purchase Processes and Performance

This was to find out from respondents if the current public procurement process in their selected institutions enhances performance of procurement staff in carrying out their duties. Responses from respondents are discussed as follow;

Four (4) respondents from Kumasi Polytechnic strongly agreed with the statement, nine (9) respondents agreed with the statement while seven (7) respondents disagreed with the statement that the current public procurement processes enhance the performance of their duties.

Four (4) more respondents from KATH also disagreed with the statement that the current purchase or procurement processes enhance the performance of their duties while the majority of twenty-one (21) agreed with the statement the current processes enhance the performance of their duties. Figure 9 illustrates.

Figure 9: Purchase or Procurement Processes and Performance



Source: Field Survey, 2012

5. Conclusion and Recommendation

5.1 Conclusion

Purchasing is an important part of doing business in today's competitive environment, and that the role of purchasing units of institutions cannot be over emphasized. In spite of the important role such units play, it is faced with lots of challenges which needs to be tackled to make the purchasing units of institutions more vibrant as their activities go a long way to impact on the performance of the whole organization or institution.

It was realized that the quality of materials supplied in the selected institutions depended on the purchasing process adopted by both institutions, more over the continuous supply of materials depended on the procurement units of the institutions, this shows that such units are very important for organizations and there is the need to ensure their smooth running.

Moreover, the activities of the purchasing unit impacted or impacts on the whole institution, quality materials supplied is for the betterment of the institutions while the continuous supply of such materials without delays are also good for the institutions involved.

In spite of these role they play, they are faced with lots of challenges which include long bureaucratic measures, lack of innovations, delays in lead time and high administrative cost which stalls the development of purchasing units.

5.3 Recommendation

From the research, it has been revealed that purchasing process have an impact on performance in organizations and it is also characterized by both negative and positive results as far as the progress and growth of an organization is involved. Considering the importance of purchasing units in organizations there is the need for immediate steps to be taken to improve its performance in organizations. The following is therefore recommended.

The issue of electronic procurement should be given a critical look; e-procurement involves the use of technology in the purchase of materials over the internet. All the selected institutions had no access or the facilities to do this and should be encouraged to get in electronic procurement which compared to the current mode of purchase is faster.

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