

Efficient Procurement of Operational Resources in the Power Distribution Sector

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Abstract

The topic under research is the efficient procurement of operational resources in the power distribution sector. Purchasing is evolving into a strategic business activity and thus also a potential contributor to efficient procurement practices in the energy sector. However, the literature on the involvement of other departments in effective and efficient procurement practices is lacking. I therefore found it necessary to conduct an exploratory study to assess the procurement practices in the energy sector, and the contribution of purchasing and other departments to this effect.

The research pointed out certain facts which I analyzed and made certain recommendations and suggestions concerning the creation of cross functional team towards the achievement of good procurement practices in the energy sector.

Keywords: Operational Resources, Power Working Force, Efficient Work Force

I. INTRODUCTION

Electricity is essential to the existence of man and all living things. All of mankind, whatever their stage of development and their social and economic conditions. Electricity is an important commodity that drives every economy, both public and firms alike hence forcing the current president of the country H.E. JOHN DRAMANI MAHAMA to coin out a power ministry led by DR. KWABENA DONKOR out of the energy ministry due to the erratic power supply in the country popularly known as “DUMSOR”. Electricity as a source of power goes through various channels before given out to customers ,the VOLTA RIVER AUTHORITY (V.R.A) in collaboration with other independent power producers “generates” electricity, the GHANA GRID COMPANY (GRIDCO) then “transmits” the electricity from (V.R.A) to the ELECTRICITY COMPANY OF GHANA (E.C.G) which in turn “distributes” the electricity through sub-stations to the nation and beyond. Anything that disturbs the provision and supply of electricity therefore tends to disturb the very survival of humanity. Petersen R. (November, 2004). Procurement is the acquisition of goods or service. It is therefore favorable that, the goods or services are appropriate and that, they are procured to meet the needs of the purchaser in terms of quantity and quality, time and location (Weele, 2000). In relation to the above, effective procurement of operational resources talks about the acquisition of equipment that are procured to help the Electricity Company of Ghana to enhance their operations to ensure effective and efficient power supply to the industries and residents of Ghana communities in terms of its quality, quantity and safeness. Purchasing function in the 21st century has seen tremendous growth in all sectors of industry in the world, over a result of organizations in their bid to reduce cost. This has seen the need to position their purchasing department in a strategic operational position. According to Weele (2000), an effective and efficient operation of purchasing and supply function can make an impact in contributing to a company’s results. The purchasing function has suffered a low key role position and has not been considered until recently, where organizations in Ghana have found it expedient to include effective procurement systems in their short and long term planning. This came as a result of the realization by organizations in Ghana that, the purchasing function would become more strategic and innovative and as much should be carried out effectively and professionally to help realize organizational goals. This realization culminated in the passage of the public procurement act of 2003, (ACT 663) to streamline the purchasing function, unlike the traditional way of doing things, where the purchasing function was more or less based on “to whom you know” system. The procurement act of 2003 (ACT 663) promulgated by the Ghana government provides the administrative and institutional arrangement for purchasing, stipulating a comprehensive Competitive tendering procedures.

II. LITERATURE REVIEW

A. Efficient Procurement

There are three main keys to efficient procurement, and these are the following:

- 1. TRANSPARENCY:** Transparency is operating in such a way that it is easy for others to see what actions are performed. For example, a cashier making change at point sales by segregation customer’s large bills, counting

up from the sale amount, and placing the change on the counter in such a way as to invite the customer to verify the amount of change demonstrates transparency.

2. **FLEXIBILITY:** purchasing reduces your exposure to fluctuating commodity prices by allowing energy to be purchased in packets across the term of an energy supply agreement.
3. **ACCOUNTABILITY:** The obligation of an individual or organization to account for its activities, accept responsibility for them, and to disclose the results in a transparent manner. It also includes the responsibility for money or other entrusted. (S.L.. Schooner, 2009)

B. Measuring The Effectiveness And A Efficiency Of Public Procurement

Measuring and reporting the effectiveness of procurement is a new challenge in the field of purchasing. In many organizations the effects of purchasing have not been determined or evaluated. The procurement effectiveness reporting tool will produce information on the effects of procurement that can be then used in developing the purchasing activities in an organization. The following objectives were determined: defining different methods of measuring procurement effectiveness and efficiency.

- (1), creation of a procurement effectiveness reporting tool aligned with the corporate and procurement strategies
- (2) Drawing development plans for effectiveness reporting.

Measuring procurement effectiveness has always been an interesting topic for organizations and corporations. The pressure of reporting of the effects of the procurement function to the management is high and in many cases related to the personal performance targets of procurement staff. These factors may include issues such as a new service model, better payment terms or a decreased number of suppliers. (Weele, 2000)

C. Procurement Processes And Performance

Key words: Procurement Process, Purchasing Performance, efficiency and effectiveness

The procurement function has not been given the recognition it deserves in developing countries, in most public entities, regardless of the effort by the partners like the World Bank, the International Trade Organizations, the United Conference on Trade and Development, the World Trade Organization and, others. This could be deliberate or sheer ignorance on the value. Procurement function could contribute to any organization (Telgen, Zomer, & de Boer, 1997). Continue incurring unnecessary costs (DCD/DAC, 2003). However, it is important that appropriate performances are implemented. It should not be any performance. The issue of basing on financial performance and neglecting or ignoring non-financial performance is not helping the procurement function because only partial performance is considered (Lardenoije, VanRaaij, & Van Weele, 2005).

D. Types Of Procurement Documents

According to the management of the Electricity Company of Ghana, the basic documents available for the purchases of their operational resources items are:

E. Bill Of Lading

A bill of lading is a legal document between the shipper of a particular good and the carrier detailing the type, quantity and the destination of the good being carried. The bill of lading also serves a receipt of shipment when the items are delivered to a predetermined destination. (Sweet & Maxwell, 2011).

The document must accompany the shipped goods, no matter the form of transportation, and must be signed by an authorized representative from the carrier, shipper and receiver.

i. Certification Of Shipment (Coshipment)

This is a document that is made available after the goods have been shipped signifying that, a certain lot of goods have been shipped. (Wisconsin Red book, Administrative Rules & Orders 1940).

ii. Certified Invoice

This is a document required when the exporter needs to certify on the invoice that, the goods are of a particular origin or manufactured at a particular place and in accordance with the specified contract.

F. Current Issues In Public Procurement For Developing Countries

In most developing countries such as Ghana, the procurement function is transitioning from a clerical non-strategic unit to an effective socio-economic unit that is able to influence decisions and add value (Knight, Harland, Telgen, Thai, Callender, & Mcken, 2007; and Facolta di Economia, 2006). Developing countries in one way or another have reformed their public procurement regulations. The reforms have not been limited to regulations only, included public procurement process, methods, procurement organizational structure, and the workforce. The reforms have been as a result of joint effort with various development partners like the World Bank, International Trade Centre, WTO, and UNCTAD varying from country to country. Procurement may be conducted through the procurement cycle. Regardless of the effort by the PPDA and the acknowledgement that the procurement department is capable of adding value to the organization still a large number of the internal customers act on their own and more frequently bypass the procuring department (Schiele & McCue, 2006). The main reason for this is ignorance of how the public procurement operates (Telgen, Zomer, & de Boer, 1997). The purpose of the procurement cycle was to encourage competition among suppliers, professionalism, good business ethics and non-discrimination among others.

G. Development Of Procurement Performance

According to Lardenoije, Raaij, and Weele (2005), since the 1930s, procurement performance has been attracting great attention from practitioners, academicians and researchers. In 1931, the National Association of Purchasing Agents (NAPA) in the United States of America (USA) organized a contest on the topic. In 1945, a committee was set up by NAPA to draft guidelines on procurement performance. In 1962, the American Management Association (AMA) funded a survey to assess performance of the procurement function. In the 1970s and 1980s, scholars conducted independently studies in American and Dutch companies on purchasing performance in which they established scores of performance. On 2nd March, 2004, the European Institute of Purchasing Management (EIPM) organized a conference "Measuring Purchasing Performance" and the issues that were tackled in the conference included: measurements of intangibles as opposed to tangibles, financial measurements as opposed to other indicators, how to link measurements with everyday actions and strategy implementation, what you should know for developing a measurement system, the scope of measurement systems, limits of measurement systems, process and results measurements, measurements for driving actions towards measurements for reporting, links of purchasing measurements systems with business systems and individual performance, and tactical and strategic measures indicating that institutions and academic bodies acknowledge the importance of measuring purchasing performance.

H. Link Between Procurement Processes, Efficiency, Effectiveness And Performance

Procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain such performance levels in an entity. Knudsen, (1999). According to Van Weele (2006) purchasing performance is considered to be the result of two elements: purchasing effectiveness and purchasing efficiency. Performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements. This means that purchasing performance is not an end in itself but a means to effective and efficient control and monitoring of the purchasing function. Purchasing efficiency and purchasing effectiveness represent different competencies and capabilities for the purchasing function. CIPS Australia (2005) presents the differences between efficiency and effectiveness. Efficiency reflects that the organization is "doing things right" whereas effectiveness relates to the organization "doing the right thing". This means that, an organization can be effective and fail to be efficient; it is a challenge to balance the two, if any organization is to change its focus and become more competitive. Performance is a key driver to improving quality of services while its absence or use of inappropriate means can act as a barrier to change and may lead to deterioration of the purchasing function. Organizations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover. Amaratunga & Baldry (2002). According to Artley & Stroh (2001), Amaratunga & Baldry (2002) and CIPS Australia, (2005), measuring the performance of the purchasing function yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage.

i. Innovative Operational Or Technical Procurement

Innovative technical procurement stands for an organization's ability to create procurement entities that include components of creativity and knowhow. The responsibility for constant development and cooperation to support it should be taken as a criterion for public procurement. This will increase the productivity in the organization's value chain and give additional value to its competitiveness.(Yliherva 2006, pg30)

ii. Measuring procurement Efficiency

Measuring procurement effectiveness can be explained through three important factors;

- The effect on organization's economic performance,
- The effectiveness of supplier relationship management and
- How procurement correlates with the organization's corporate strategy.

iii. Effect On Organization's Performance

The development of procurement function and its effects on organization's performance depend on two factors; the monetary value and the cost saving opportunities. Especially when the value and volume of the purchases is high, the opportunities to save money should be utilized. Efficient development of the procurement function can prove to be very financially profitable and result in higher profits for the organization.(Iloranta 2008, pg102)

I. Supplier Relation

James Morgan (2000) observed in purchasing, good purchasing practices are integral to small business success, and few factors are as vital in ensuring sound purchasing methodologies as the selection of quality suppliers. Indeed, finding good suppliers and maintaining solid relations with them can be an invaluable tool in the quest for business success and expansion. Surprisingly, a large number of procurement organizations, suppliers have become an important factor in their planning. In fact, for many procurement organizations, suppliers have become their secret competitive weapon, their hidden resource, their competitive edge." These competitive gains can manifest themselves in a wide range of areas, from better prices and delivery times to increased opportunities to consider and implement innovative practices. According to Paul Inglis(2007), in purchasing, improvement will not be realized without meaningful leadership from business owners and executives. "Leading companies develop tailored supply strategies that are directly linked to their corporate strategies," he said. These leaders emphasize shareholder-value creation, revenue growth, and cost competitiveness, and establish specific programs with their key suppliers in order to ensure that these priorities are addressed. Smart business leaders, he added, "use suppliers to maximize their own product competitiveness, going beyond the narrow focus of cost reduction. Leaders exceed traditional sourcing practices, adopt new models to fully leverage supplier capabilities, and further their own position in the marketplace.

i. Supplier Relationship Management

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ii. Supplier Relationship Development

According to Jeffrey Liker and Thomas (2003). Understanding your suppliers and utilizing your suppliers mutual competition has proven to be a very effective way of supplier relationship development. Other development ideas include managing your suppliers to improve their performance and abilities. It's important to keep the managing role to yourself when conducting shared product development projects. The buying organization should communicate information with determination to selected suppliers.(Liker & al. 2004, pg4)

When assessing the effectiveness of the procurement function, one of the first things that should be accounted is the strategic influence. This means the level of participation and involvement from the procurement function to the strategic decisions made in the organization. Another factor to consider is the financial influence the procurement function has toward

iii. Supply Chains And Partnerships

In recent years, countless management experts and analysts have touted the benefits that businesses of all sizes can realize by establishing "partnerships" with their suppliers. Under such a plan, which is also sometimes referred to as "supply chain management," distribution channels are set up across organizations so that all the members of the channel, from suppliers to end users, coordinate their business activities and processes to minimize their total costs and maximize their efficiency in the marketplace. But while this trend has become more prevalent in today's business environment, it is still practiced in only spotty fashion in many industries. According to, A.T. Kearney(1997), survey of business executives, common impediments to establishing true business partnerships with suppliers include: attachment of greater importance to other initiatives; comfortable relationships with existing suppliers; dearth of cross-business unit cooperation; doubts about the benefits of instituting such practices; lack of cross-functional cooperation; poor monitoring and control systems; inexperience at managing improvement programs; and distrust of suppliers.

J. Differences Between International Purchasing And Global Sourcing

Global sourcing, which differs from international buying in scope and complexity, involves proactively integrating and coordinating common items and materials, processes, designs, technologies and suppliers across worldwide purchasing, engineering, and operating locations (Trent & Monczka, 2003). Global sourcing is not only a starting point of logistical activities, but is also a set of managerial activities. The object of said activities is to accomplish the goals of manufacture or sale, which includes the choice of suppliers, confirming the quality and quantity, negotiating the price, and so on. The process of global sourcing is a long-term strategy, which includes the evaluation and selection of foreign potential suppliers, while international purchasing involves daily activities supporting manufacturing and services department.

i. Relevance And Benefits Of Global Sourcing

Global sourcing is defined as a centralized procurement strategy for a multinational company, wherein a central buying organization seeks economies of scale through corporate-wide standardization and benchmarking. A definition focused on this aspect of global sourcing is: "proactively integrating and coordinating common items and materials, processes, designs, technologies, and suppliers across worldwide purchasing, engineering, and operating locations" (Monczka, Trent, & Handfield, 2005; Monczka, Trent, & Petersen, 2008). With growing scholarly and executive attention over the past couple of decades, sourcing and supply-chain management have been shown to play a significant role in achieving competitiveness (Ellram Carr, 1994; Gadde & Håkansson, 1994).

K. Challenges Of Delivery Of Operational And Technical Items

According to Petersen et al (2006), delivery is the process by which manufactured or produced items are transported from the producer's point of view to the consumer domain by a selected mode of transportation. The delivery of the technical items has the following challenges:

- a. Certification of shipment documents are sometimes delayed, making the receipt of the items very difficult.
- b. Difficulty in combining two or more modes of transportation has also been another challenge of effective technical procurement.

III. SUMMARY, FINDINGS, CONCLUSIONS, & RECOMMENDATION

A. Summary

This work has been done helping the nation to solve the energy problem in the country and was done to analyze the efficiency of technical procurement at Electricity Company of Ghana.

B. Findings

Through the investigations, interviews and questions, it was found that, there are about seven departments in Electricity Company of Ghana. This entity is a power supply entity and the departments are procurement, business planning and technical, maintenance, quality control, finance, central store or warehousing. According to research analysis collected from the purchasing department at ECG, majority of their raw materials needed for power supply are imported, and that experts in this field are required to help facilitate the importation of such equipment and items. The purchasing management and staff must be aware of their contribution in ensuring efficiency in their technical procurement. After a successful collection, analysis and evaluation of data collected, the following were identified as some of the activities that may lead to an efficiency in the technical of the Electricity Company of Ghana. It was found out that, cost insurance and freight is the most effective incoterm used in their technical purchases. Again, through a thorough research work, it was realized that, the delivery of the technical items procurement meet the lead time. And for that matter, for the management and staff of Electricity Company of Ghana to ensure efficiency in their technical procurement, the following activities and practices should be critically analyzed and managed:

- a. Lack of experienced technical personnel to help undertake efficiency procurement of operational resources.
- b. Inadequate resources or finance to purchase these operational items.
- c. Poor documentation, which sometimes leads to late delivery of such operational items.

Again, it was found out that, the various departments play effective roles in buying the right quality of items and equipment that conform to the specification designed by the technical or the engineering departments as a result of the existence of cross functional teams.

C. Conclusion

This research has conducted a study into the role of purchasing and other departments in the effective and efficient procurement of operational resources. This was done at Electricity Company of Ghana, which is a production and a service entity. Investigations were carried out to find out how efficient the company to their technical procurement is and to possibly its benefits to the general public consumption.

D. Recommendation

From the above data collected, analysis, findings and information gathered from the Electricity Company of Ghana, as summarized and concluded, I therefore recommend to the management of this entity should ensure that, the following measures are put in place:

- a. Establish a cross functional team within their operations
- b. Ensures that all documents needed for purchases are made available when needed
- c. The right sort of INCOTERM(S) is used for such purchases
- d. Various avenues and channels should be opened to receive queries.

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