
**PROCUREMENT PROCESSES AND PERFORMANCE: EFFICIENCY AND
EFFECTIVENESS OF THE PROCUREMENT FUNCTION**

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Abstract

For decades procurement performance has been attracting great attention from practitioners, academicians and researchers due to poor performance resulting from non-adherence to proper processes and procedures. This paper aims at identifying financial and non-financial measures that can contribute to improved performance of the procurement function. Literature suggests that procurement efficiency and procurement effectiveness of the purchasing function are measures of procurement performance. A survey instrument was developed and administered to a public entity in Uganda with a view to establish the importance of financial and non-financial measures in the performance of the procurement function. The paper concludes that other than financial measures, non-financial measures also contribute significantly in the procurement process and performance.

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

Introduction

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 Organisation, the United Nations Conference on Trade and Development, the World Trade Organisation and, others. This could be deliberate or sheer ignorance on the value the procurement function could contribute to any organization (Telgen, Zomer, & de Boer, 1997). While functions like Human Resource (HR) and Finance can have their performance measured, this is not the case with the procurement function. The failure to establish performance of the procurement function has led to irregular and biased decisions that have costly consequences to every entity. The need to have coherent methods of performance of the procurement function in public entities, particularly in developing countries, has never been as sound as it is now. Delaying will worsen the already deteriorating performance, loss of professionals, and organisations will 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, Van Raaij, & Van Weele, 2005).

Current Issues in Public Procurement For Developing Countries

In most developing countries, 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 organisational 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.

None the less, most developing countries are facing a problem of rapid changes in public procurement requirements. The changes are impacting pressure on how the procurement function performs its internal and external processes and procedures in order to achieve its objectives. The ability to realize procurement goals is influenced by internal force and external force. Interactions between various elements, professionalism, staffing levels and budget resources, procurement organisational structure whether centralized or decentralized, procurement regulations, rules, and guidance, and internal control policies, all need attention and influence the performance of the procurement function. In addition, public procurement is faced by the challenges imposed by a variety of environment factors (external factors) such as market, legal environment, political environment, organisational and socio-economic environmental factors.

Faced Issues In Public Procurement In Uganda

Historically, public entities of Uganda have been known for their poor performance and corruption, resulting from non-adherence to processes and procedures, poor resource

utilization, poor personnel management and training, inadequate payment and benefits. It is on this basis that the government of Uganda, in 1989, set up the Public Service Review and Reorganization Commission (PSRRC), under the Ministry of Public Service, to examine and propose recommendations on public service improvement (Ministry of Public Service, 2008). The ultimate goal was to improve the general service delivery to the public, create efficiency and effectiveness based on transparency in processes and procedures, performance evaluation systems and clear organizational goals and objectives.

The results of the commission led to the establishment of government agencies by law: Public Procurement and Disposal of Public Assets Authority, Uganda Revenue Authority, National Environmental Management Authority, Civil Aviation Authority, National Agricultural Research Organization, Uganda Wildlife Authority, Inspector General of Government and many others. Particularly, the PPDA Act (2003) in Uganda describes how public procurement may be conducted through the procurement cycle. The roles and responsibilities of public entities are limited to the procurement cycle presented in appendix 1 above in executing their activities.

Regardless of the effort by the PPDA and the acknowledgement that the procurement department is capable of adding value to the organisation 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 (PPDA, 2007). In addition, the procurement departments of public entities in Uganda are faced with the problem of not having enough information about the procurement procedure, its inputs, outputs, resource consumption and results and are therefore unable to determine their efficiency and effectiveness. This problem requires establishment of clear procurement procedures and performance standards. Performance when adopted, will provide the decision-makers in the procurement department with unbiased and objective information regarding the performance of the procurement function (Knudsen, 1999).

However, for a public entity in a developing country to conduct procurement performance there are numerous challenges that are encountered: i) there are many ways of measuring that may be in use, ii) most measures are irrelevant iii) there is no way of standardising the measurements and iv) conducting performance measurement is costly. The reasons for these challenges were given by Centre of Excellence London (2006): i) inaccurate information ii) lack of a link between procurement measures and corporate objectives iii) measurement of procurement performance is regarded as an overhead and not an integral part iv) people do not understand the benefit of measuring procurement performance and v) interference of other stakeholder and mainly the measures were developed in a different environment. Though management shows interest in managing and controlling the procurement function as efficiently and effectively as possible, the real problem is how to realize procurement goals that are influenced by internal force and external force in the public sector. In view of the importance of the procurement function and the need to have coherent methods of performance of the procurement function,

it is therefore necessary to investigate the measures that would enhance procurement efficiency and effectiveness of the purchasing function.

Statement of The Problem

Regardless of the effort by the governments of developing countries, like Uganda and development partners like World Bank to improve performance of the procurement function, public procurement is still marred by shoddy works, poor quality goods and services. Failure to implement or delayed implementation of recommended performance standards has resulted in unnecessarily high operation costs, uncoordinated business activities, and failure to attract and retain experienced and skilled personnel in the procurement positions, thus affecting the function's performance (David, 2002; DCD/DAC, 2003; NSSF, 2005; Atkinson, 2006; and PPDA, 2007).

It was reported in 2006 that the procurement functions of most public entities were not complying to set procurement process and performance procedures, leading to irregular and subjective decisions (PPDA, 2006). These decisions have had costly consequences for any public entity, and the country at large. It is in the interest of the researchers that financial performance should NOT be the only measure to conclude the performance of the procurement function thus intangible performances like quality of procured goods and services, timely delivery of orders, customer satisfaction, dependability, flexibility and quality of employees should all be included. Therefore, the purpose of this study was to identify how the procurement process can contribute to improved performance of the procurement function. Indeed, the measures will enhance procurement efficiency and procurement effectiveness of the purchasing function as different models have shown how procurement process has a link to improved performance (Department of Trade and Industry, 2008).

Development of Procurement Performance

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) organised 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 (Lardenoije, Van Raaij, & Van Weele, 2005). 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) organised 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 (The European Institute of Purchasing Management, 2004).

Apparently the issue is still not solved in developed countries. There is still a knowledge gap on how the procurement process can contribute to improved performance of the procurement function in developing countries. Chief Executive Officers (CEOs) of organisations are often heard saying “the procurement function is not performing well”. The issue of generalising that the procurement function is not performing without indicating the criteria used to reach that conclusion or just basing it on financial statements is not reasonable. Only when the procurement function is well planned, it is easy to identify areas where it is performing well, and where there is need for improvement (Department of Public Works, Queensland Government, 2007).

In addition, organisations have concentrated on costs or savings as the sole indicator or measure of performance. If costs decline, the purchasing function will be praised, while if savings decline, the purchasing function will be queried. It is as if the purchasing function is established to focus on minimizing costs while maximizing efficiency. Financial measures ignore market dynamics and increased complexity in acquisition of goods and services for public entities (Lardenoije, Van Raaij, & Van Weele, 2005). With recent developments in purchasing, it is significant that what is measured is not only important to the entity/organisation but should also cover all core areas and activities of procurement (Department of Public Works, Queensland Government, 2006). Though purchasing performance may mean different things to different people (CIPS Australia, 2005), its focus on financial and non-financial benefits, efficiency of procedures, and effectiveness, and ability to establish a range of measures to evaluate procurement activities, is noticed by many (Department of Public Works, Queensland Government, 2006).

However, coming up with a precise meaning of purchasing performance is still difficult. This is because purchasing performance covers broader areas of procurement, for instance: performance of the purchasing function, the purchasing department, the purchasing process on a given contract, employees of the procurement department, the supplier base and many others (Knudsen, 1999). In the following sections, purchasing performance will be defined in line with purchasing function, pointing out the two most important measures of purchasing performance as purchasing efficiency and purchasing effectiveness, although other category measures also exist, they will be tackled in another paper.

Link Between Procurement Process, Efficiency, Effectiveness and Performance

Knudsen, (1999) suggested that procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. 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 organisation 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 (Lardenoije, Van Raaij, & Van Weele, 2005). 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 organisation is “doing things right” whereas effectiveness relates to the organisation “doing the right thing”. This means an organisation can be effective and fail to be efficient, the challenge being to balance between the two.

For any organisation to change its focus and become more competitive Amaratunga & Baldry (2002) suggest that 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. Organisations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover (Artley & Stroh, 2001, Amaratunga & Baldry, 2002 and CIPS Australia, 2005). Measuring the performance of the purchasing function yields benefits to organisations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage as was noted by Batenburg & Versendaal (2006).

Until an organisation measures purchasing performance they will never know how well they are performing and why they should measure purchasing performance. Department of Public Works, Queensland Government (2006) identified four reasons for measuring purchasing performance:

- i) It provides feedback on the extent to which the planned outcomes for purchasing are being achieved in the organisation.
- ii) It provides information for analysis and decision making.
- iii) It provides information to executive management about the effectiveness, efficiency, value and contributes to the recognition of the procurement function.
- iv) It provides focus and motivation for purchasing staff.

Methodology

The purpose of this study was to identify how the procurement process can contribute to improved performance of the procurement function focusing on efficiency and effectiveness. Therefore, the data presented in this study was collected using the methods outlined in the methodology. The population of the study was made up of the staff members of the managerial level of the entity. This study used purposive sampling. This method exposes the researcher to various stakeholders who have different experiences with the issues under study.

The selection criteria were based on the number of managers per function and in this study they were above 30 respondents where three managers per function were selected. A number above 30, according to Sekaran, (2003) is acceptable. The functions included Human Resource, Investment and Estate, operations, IT, Communications and Marketing, Finance, and Internal Audit. In addition, there was an exception of the procurement function with 10 respondents. All the above staff had sufficient knowledge on how performance of the procurement function could influence the procurement process. Twenty three (23) responses of the distributed 32 were received; a representative of 71.9% of the total structured questionnaires distributed. The adopted Likert Four Point rating scale of 4, 3, 2, and 1, was used to analyse responses in the questionnaire.

The mean, standard deviation, Cronbach's Alpha and t-test were used to verify results and arrive at certain conclusions. A mean of 2.50 was used as cut-off point decision making for each item on the instrument. Any item with a mean of 2.50 and above was considered adequate and hence enhances the level of respondents on the use of committees in University Governance. Any item with a mean of less than 2.50 was considered inadequate. Cronbach's Alpha was used for testing the reliability of the questionnaire responses where the critical point for Cronbach's Alpha is 0.7. indicating reliability and stability of results. The results were tabulated and presented as below.

Results and Discussion

Procurement Performance

The data presented below helps to answer research question on procurement performance based on the opinions of the respondents that reflects the reality: How can the performance of the purchasing function be measured? The distinct measures considered in this study were both financial and non-financial. Respondents were asked to rank the measures as listed in the questionnaire, on a Likert scale of 1 to 5, where 1 represented strongly disagree and 5 strongly agree. According to the respondents, both financial and non-financial measures can be used for measuring the performance of the procurement function. The results are presented in tables 1 and 2.

In table 1, non-financial measures were arranged in an ascending order based on the mean, from safety of employees with a mean of 3.2605 to quality of procured goods and services with a mean of 3.9565. Though the means show a relative difference of 0.696 between the lowest and the highest, the standard measure of variability around the means is 0.10612 which is not significant. The other non-financial measures mostly identified by the respondents included cycle time, quality of employees, flexibility, dependability and customer satisfaction which greatly represent the generic measures captured in the conceptual framework.

Table 1: Non-Financial Measures

Non-financial measures	N	Min.	Max.	Mean	Std. Dev.
Safety of employees	23	2.00	5.00	3.2609	.91539
Purchasing efficiency	23	1.00	5.00	3.5217	.94722
Safety of products	23	2.00	5.00	3.5652	.89575

Knowledge of supply market	23	2.00	5.00	3.6087	.78272
Purchasing effectiveness	23	1.00	5.00	3.6522	.83168
Customer satisfaction	23	2.00	5.00	3.6957	.87567
Dependability	23	2.00	5.00	3.6957	.63495
Flexibility	23	2.00	5.00	3.7391	.81002
Quality of employees	23	2.00	5.00	3.7391	.81002
Cycle time	23	1.00	5.00	3.8261	.98406
Quality of goods and services	23	1.00	5.00	3.9565	1.02151
Valid N (listwise)	23				

Source: Researcher’s database (2010)

The additional suggestions from the respondents included:

- i) Time taken to complete procurement procedures,
- ii) Information flow among the parties,
- iii) The level of competition to attain value for money,
- iv) The durability of what is purchased and v) Costs benefit analysis of every transaction.

From table 2, financial measures were arranged in an ascending order, based on the mean, from profit centre with a mean of 3.4783 to purchasing audit and budgetary controls both with a mean of 3.7826. This means the respondents use purchasing audit and budgetary controls more as measures for financial output than profit centre, even though, profit centre has a higher standard measure of variability around the mean of 0.79026. The other important financial measure identified by the respondents is cost accounting. Cost accounting helps management in decision making and financial reporting, meaning it is commonly used by the managers.

Table 2: Financial Measures Financial measures

Financial measures	N	Min.	Max.	Mean	Std. Dev.
Profit centre	23	2.00	5.00	3.4783	.79026
Purchasing ratios	23	2.00	5.00	3.5652	.84348
Vendor rating	23	2.00	5.00	3.5652	.78775
Cost accounting	23	2.00	5.00	3.6957	.97397
Budgetary controls	23	2.00	5.00	3.7826	.85048
Purchasing audit	23	2.00	5.00	3.7826	.73587
Valid N (listwise)	23				

Researcher’s database (2010)

The tables above show that both financial and non-financial measures are used. The responses ranged from the minimum who disagreed to the maximum who strongly agreed to the measures of purchasing performance. Whereas the means presented in tables 8 and 9, show to be highest at 3.9565 for non-financial measures, the respondents highlighted financial measures as the most commonly used in their organisation with the mean average of 1.8696, while responding to a subsequent question. Clearly, financial measures are appropriate and commonly used for public entities. The reasons that frequently appeared for this answer are that the public sector depends on budgets which are expressed in monetary terms as a measure. However, on conducting a summary score for the two measures the results were different as presented in table 3, below.

Table 3: Summary Score for Financial and Non-Financial Items

Summary items	N	Min.	Max.	Mean	Std. Dev.
Summary score for financial	23	1.82	4.91	3.6601	.65166
Summary score for non-financial	23	2.00	5.00	3.6449	.72527
Valid N (listwise)	23				

Source: Researcher's database (2010)

From the above table, the mean for financial and non-financial measures show a minor difference. The respondents show that financial and non-financial measures are equally important in measuring the performance of the purchasing function. In addition, table 10, compares the financial and non-financial scores which were obtained by summing up all the responses in each category and dividing them with the total number of items for each score. The mean for financial was 3.6601 and the mean for non-financial was 3.6449, indicating no significant difference between the measures. This confirms the opinion of the respondents but it could also mean that the financial and non-financial measures are not clearly differentiated or understood in daily practice.

Conclusion

The results from this study suggested that purchasing performance could equally be measured using both financial and non-financial measures. As earlier indicated, having performance measures is not an end in itself but a means to effective and efficient control and monitoring of any function (Neely, 1999; Amaratunga & Baldry, 2002 and Waal, 2007). Therefore, organisations with established performance measures for their procedures, processes, and plans experience lower customer dissatisfaction and employee turnover than those which do not have. The issue is to ensure that measures are being implemented and measure what they were intended to measure. Implementing purchasing measures is not as easy as it may sound. It requires preparation, coordination, team work, constant communication and feedback.

To ensure entities maximize purchasing efficiency and effectiveness, loss of professional turnover should be reduced. This can be done through establishing clear roles and procedures within the procurement processes. To ensure value for money, there should be continuous improvement in the efficiency of internal processes and systems and public entities should maintain structures that avoid unnecessary costs. This was also adopted by The Government of Malawi (2008) a developing country in the Sub-Sahara Africa. As much as quality of procured goods and services featured the most preferred measure of procurement performance, other intangible measures like timely delivery of orders, customer satisfaction, dependability, flexibility and quality of employees should not be ignored.

Areas of Further Research

This study looked at efficiency and effectiveness of procurement processes and performance. The researchers suggest that further studies should be carried out on Procurement Processes and Performance but with emphasis on:

1. Implementation factors in purchasing measures.

2. Challenges encountered when measuring purchasing performance in achieving targets.
3. Benefits of measuring purchasing performance.
4. Deeper analysis of purchasing efficiency and effectiveness.

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