

Factors Affecting Purchasing Effectiveness in the Public Sugar Sector: A Case Study of Nzoia Sugar Company Limited

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Abstract: In the recent past, 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. Many of the studies have devoted their content to financial factors as measures of effectiveness dismally giving consideration to non financial factors. This study aimed at investigating selected non financial factors that influence the effectiveness of purchasing function in the public sugar sector guided by four specific objectives; to find out how purchasing interaction with other departments impacts on its effectiveness, to find out how Purchasing delegated authority impacts on its effectiveness, to find out how Purchasing activity Execution impacts on its effectiveness and to find out how supplier relationship management practices impacts on purchasing function effectiveness. The four variables were found to have an effect on effectiveness of purchasing function in the public sugar sector. The study adopted a descriptive case research design and the study population comprised of 118 management staff Nzoia Sugar Company Ltd. A purposive sampling technique was employed to select a sample size of 57 respondents. Questionnaires were used as the main data collection instruments. Descriptive statistics data analysis method was applied to analyze numerical data gathered using closed ended questions aided by Statistical Package for Social Sciences (SPSS). From the findings, level of task execution explained 43.1% of purchasing department's effectiveness, level of supplier relationship explained 20.9% and interaction level explained 2.2% while the level of purchasing delegated authority had a negative relationship with its effectiveness at -4.1% which means that the more autonomous purchasing department becomes the less effective it will be. The study recommends application of supplier collaboration strategies, integration of supply chain management tasks with IT to help speed up decision making process between the SCM partners, signing service level agreements (SLA), purchasing function to increase effectiveness by training and being members of professional bodies such as CIPS and KISM.

Keywords: Assessment, delegated authority, effectiveness, efficiency, inventory, non financial measures, purchasing interaction.

1. INTRODUCTION

Professional purchasers work to enhance overall performance in supply-related areas in particular and the organization in general. Paramount in their quest to improve performance is deftly focusing on both efficiency and effectiveness. While both are critically important, sometimes purchasers must choose the proportion of resources allocated to either efficiency or effectiveness. The two concepts are different, but akin. Purchasers must recognize the value of each concept and realize their interrelatedness. In a study by von Weele (1984), the position and scope of the purchasing function in the organization will, in part, dictate the measures used for evaluation and assessment.

Purchasing effectiveness can be defined as the extent to which, by choosing a certain course of action, a previously established goal or standard can be met. It is the relationship between actual and planned performance, Von Weele

(1984). As the strategic significance of purchasing increases, performance measures became more qualitative and judgmental in character - more effectiveness-oriented (non financial factors). These may include internal environmental factors to purchasing function such as supplier management, communication both internally and externally, performance of purchasing tasks, the level of participation in decision making, stage of company development, professionalism, attitude, ethics, culture, etc of purchasing staff. While,

Purchasing efficiency is defined as the relationship between planned and actual sacrifices made in order to be able to realize a goal previously agreed upon. It is related to the resources/means selected. If purchasing is viewed as a somewhat clerical function, the performance measures were more quantitative and administrative in character - more efficiency-oriented. In purchasing efficiency, strategic Cost Management is the main input into Purchasing Performance Measurement (financial factors). The tools and approaches used to systematically address cost management issues in purchasing are also useful in providing some assessment function.

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 price that the purchasing department paid for an item is not necessarily a good measurement for purchasing performance. The price of an item may fluctuate due to market conditions, its availability, and other demand pressures; therefore the purchasing department may not be able to control the price. A popular method of assessing purchasing effectiveness is to review the inventory turnover ratios. The ratio measures the number of times, on average; the inventory is used, or turned, during the period. The ratio is also used to measure the liquidity of the inventory. However, this is not always a great measure of purchasing effectiveness as seasonal requirements for having items in stock can make this measurement inaccurate. Purchasing performance measurement is a daunting task and yet it is one of the most important and significant contributions a supply management professional can make.

Non-financial measures are a relatively new idea for measuring performance and future profits and recently, there have been more and more companies using non-financial performance measures to positively affect profitability. There can be a great benefit if these measures are used correctly; however, many companies are not realizing these benefits. Non-financial measures are measures that use non-monetary units, like the number of dissatisfied customers or the number of on-time deliveries. These can be important to a company because it can affect their strategy and bottom line. This stems from the "belief that social, environmental, ethical, and geopolitical factors materially impact the ability of a company to perform favorably". Also, not all corporate activity is money; some things are non-monetary in value (Shaw, 2008). Likewise, analysts that use non-financial information more than financial information tend to create the more accurate forecasts. Indeed, investors' decisions are influenced greatly by non-financial performance information, about 1/3. These non-financial performance measures can include the "perceptions of a company's strategic vision and the company's ability to execute against it, the credibility of management, the prospects of innovations in the pipeline, the ability to attract talented people, and so on." (Low, Siesfeld, 2004).

For an organization to effectively compete in the market, its purchasing function must be strong enough to reap from savings from new markets, favorable prices, availability of goods and services continuously to enable continuous production and cost management so as to increase profits. Most of the sugar industries are capital intensive and thus requires a lot of spares and servicing. More so the Kenyan sugar industry has been undergoing changes in an effort to diversify their product line and strengthen their revenue base in the current turbulent business environment also threatened by the COMESA rules. As such a number of sugar companies have invested in implementation of various projects to expedite diversification process so as to attain projected performance and achieve their missions. Purchasing department has a central role in the implementation of such projects and thus its effectiveness determines the success of projects. The challenges that purchasing department must know and cope with is that as any other public entity, all public sugar factories are governed by the Public Procurement and Disposal Act 2005 and its Regulations 2006 that has been accused of retarding procurement processes and thus inelastic to the needs of factory emergency procurement requirements. With the challenges of prices in the world market, an effective purchasing function is necessary. The information of this research will apply to the other public sugar millers given that they use the same technology, share the same market, share most suppliers for equipments, are all governed by the same procurement rules and face the same challenges.

Statement of the problem:

From the Nzoia sugar company records, suppliers have challenged some procurement processes such as PPARB No. 38/2010 of 28th June 2010. When suppliers feel that the due process was not followed, they channel their grievances to the relevant body thus delaying the procurement process or the particular procurement being cancelled altogether. From records, the researcher found out that most suppliers demand prepayment to orders before delivery and some request for down payment. Some of these problems cannot be solely attributed to finance but to the non financial factors relating to the performance of the procurement function. None of the studies have drawn much emphasis on how non financial factors can be applied to determine the purchasing effectiveness in the public sector organizations. The study's main purpose was to find out the effectiveness of purchasing function in Kenyan public sugar sector with a specific reference to Nzoia Sugar Company, with an aim of gathering non financial data on work environment from none purchasing staff that would help to come up with recommendations and strategies on effective purchasing.

General Objective

The main objective of the study was to investigate non-financial factors affecting the effectiveness purchasing function in Kenya public sugar sector, a case study of Nzoia Sugar Company Limited.

Specific Objectives

The study was based on the following research objectives:

1. To find out how purchasing interaction with other internal departments in the public sugar sector impacts on its effectiveness.
2. To find out how delegated authority to purchasing department by other internal departments in the public sugar sector impact on its effectiveness.
3. To find out how purchasing task execution as set out in the Public procurement Act impacts on purchasing effectiveness in the public sugar sector.
4. To find out the effect of supplier relationship management on the effectiveness of purchasing department in the public sugar sector.

Significance of the Study

The knowledge of the purchasing effectiveness dimensions will help managers in three ways: (1) they can use it as a diagnosis tool of their strategic purchasing level (strategic or not), (2) they can use the underlying variables as key factors to improve their purchasing alignment with business goals and plans. (3) Nzoia Sugar Company will determine their current performance levels and because no such assessment of purchasing function has ever been done there before, this survey can act as a reference point to access whether any improvement or otherwise has occurred by a repeat of the survey in future.

2. THEORETICAL REVIEW

The study is guided by the theories of Organizational buying effectiveness and Economic theory.

2.1.1 Organizational buying effectiveness Theory

As firms recognize the purchasing function as an important resource for obtaining high quality levels, fast deliveries and cost savings (Carr and Pearson 2002), it reveals opportunities for the purchasing management to become a business key contributor. Early literature considers purchasing as a supportive activity in the traditional corporate value chain rather than as having an influence on customer value creation. By employing theoretical triangulation, early organizational effectiveness literature provided a solid foundation for the development of the concept of organizational buying effectiveness (OBE), (Dario Miocevic' University of Split, Faculty of Economics, Marketing Department, Matice Hrvatske 31, Split 21000, Croatia). Dario, build his theoretical concept on three tenets, 1) Value-oriented purchasing, 2) lateral involvement and 3) purchasing information sharing. In this theoretical concept, Purchasing Information sharing can be equated to Purchasing interaction and supplier relationships, value oriented to purchasing delegated authority and lateral involvement to purchasing Task Execution.

2.1.2. Economic Theory

Economic theory defines supply chains as multistage and multidirectional systems of autonomous decision makers. The set-up and management of such systems is the result of a social negotiation process among the interested parties regarding specific norms and standards (Halldórsson, 2007). As a result, close cooperation evolves as economically independent but otherwise mutually connected business entities that seek to harmonize their individual courses of action. Such cooperation is based on strategically oriented trust alliances and is the result of an efficient division of labour and specialization (Grant, 2006). Supply chain business process integration involves collaborative work between buyers and suppliers, joint product development, common systems and shared information. According to Lambert and Cooper (2000), operating an integrated supply chain requires a continuous information flow. However, in many companies, management has reached the conclusion that optimizing the product flows cannot be accomplished without implementing a process approach to the business. The key supply chain processes stated by Lambert (2004) are: customer relationship management and customer service.

2.3. Conceptual Framework

Purchasing effectiveness is the latent capability to coordinate, organize, and develop the institutional buying effectively in a way that produces value to the firm. Specifically, the degree of purchasing effectiveness of a firm is defined as the degree of purchasing interaction with other functions, the degree of purchasing delegated authority, the level of purchasing activity execution and the level of supplier relationship management. The proposed measurement model is presented in Figure 2.2, which shows the relationship of the underlying dimension to the proposed construct purchasing effectiveness.

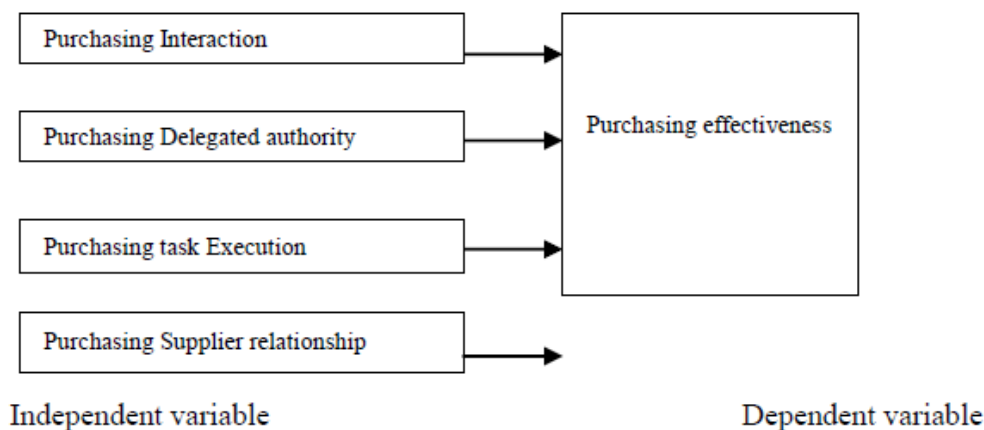


Figure2.1. Conceptual model: purchasing effectiveness

The four independent variables determine the effectiveness of purchasing function that in turn affects its effectiveness. If purchasing interaction is low, delegated authority given to purchasing department is operational or tactical, purchasing task execution is low and poor supplier relationship management policies, purchasing effectiveness is most likely to be negatively affected and vice versa when interaction is high, delegated authority to purchasing is strategic; purchasing task execution is effective and good supplier relationship.

2.3.1. Purchasing Interaction

Successful businesses understand the importance of fostering an environment that stresses effective communication and teamwork between all departments within the organization. Departments, including purchasing, can benefit from this type of supportive and collaborative environment that allows all segments of an organization to support each other while working toward departmental and company goals. Under the pressure to increase competitiveness, many firms have formed cross functional teams in order to speed up the new product development or equipment acquisitions, improving quality or reducing costs.

2.3.2. Purchasing delegated authority.

Delegation is a formal agreement between the purchasing department and the top management of an organization regarding the amount of order level to allow purchases at that level to be processed and approved directly in procurement department. The agreement is signed by the head of purchasing department responsible for the transactions and the chief

Executive officer of a company. Reviews for compliance are incorporated into the agreement and purchases must be completed in accordance with all government Acts, policies and procedures. As firms recognize the purchasing function as an important resource for obtaining high quality levels, fast deliveries and cost savings, it reveals opportunities for the purchasing management to become a key contributor. The top management support has a significant impact in the way the function is perceived, and that perception induces the purchasing involvement in strategic decisions.

2.3.3. Purchasing Task Execution

The basic objective of purchasing is to provide the right goods, services at the right place, at the right time in quality and for the right price. Within an R&D environment, Stuart (1991) realized that meaningful purchasing involvement appeared to require a proactive purchasing, i.e., a purchasing function that actively searches for information concerning future directions and expected purchases. Therefore, it can be stated that purchasing function needs to know "how to do" (appropriated activities) the best purchase, in order to contribute effectively to business goals. Given the reliance on and the increasing complexity of technology, improving buyers' technical skills through training or job rotation in operating areas appears to be essential. This is especially important if the purchasing organization plans to take on a more strategic role.

2.3.4. Purchasing Supplier relationship

In any organization, purchasing department in the link between a Company and the suppliers of goods and services. Communication to suppliers can take several ways such as through telephone, letters, purchase orders and contracts. Telephone communications should be followed with official letter or email. In order to have the quality goods and services needed by the company in time and reasonable prices, purchasing department must develop good relationship with their suppliers. Good relationship can save a company in times of emergency in that goods can be delivered and payment done later. Also the Company, out of good relationship, can decide to develop its suppliers to expand their base in form of paying suppliers in advance, offer training or regular visits to built in quality of end products to be supplied.

2.4. Empirical review

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. Developing countries in one way or another have reformed their public procurement regulations. The reforms have not been limited to regulations only, but include 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. (Knight, Harland, Telgen, Thai, Callender, & Mcken, 2007, and Facolta di Economia, 2006).

Nonetheless, 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 organizational structure whether centralized or decentralized, procurement regulations, rules, and guidelines, 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, organizational and socio-economic environmental factors. Historically, public entities of Kenya 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, (Edwards, 2008).

In most cases, the organization has its own procurement function which serves 80% of the total acquisitions. The direction of development in the future aims at taking the controlling and management of procurement under a centralized procurement function. The procurement processes can be divided into three categories: strategic, tactic also known as control level and operative/clerical categories. Strategic procurement includes planning and controlling operations as well as human resource management and is estimated to take 14 % of the procurement staff's time. Tactical procurement involves tasks that concern supplier relationship management. An estimated 34% of procurement resources fall under the tactical procurement. Operative procurement has the biggest share when it comes to measuring how much of the resources it accounts for, with a 47 % share. Making orders and organizing transportation are both time consuming tasks

of operational procurement. The most common issues that operative procurement staffs have to face are the constant rush and lack of operational planning. Other issues that make the work more difficult are a shortage of demand forecasts and a poor quality as well as poor information flow within the organization. The information system rarely supports the work of the procurement function and thus is a typical source for development. (Iloranta 2008, 89-90).

3. METHODOLOGY

The study adopted a descriptive research design. The study gathered both quantitative and qualitative data that describes the nature and characteristics of factors affecting the effectiveness of purchasing function.. *Mugenda and Mugenda (1999)* describes descriptive research as including surveys and fact- finding enquiries adding that the major purpose of descriptive research is to describe the state of phenomena as it exists at present. Questionnaires were used as the main data collection instruments and a pilot study was conducted to pretest questionnaires for validity and reliability. Descriptive statistics data analysis method was applied to analyze numerical data gathered using closed ended questions aided by Statistical Package for Social Sciences (SPSS). Regression carried out to establish the relationship between the research variables. The findings have been presented using tables and charts.

Pilot Study

The objectives of the pilot study were (1) to examine the validity of this study, (2) to determine the clarity and usefulness of the questionnaire, (3) to refine the procedures for the actual survey, and (4) to estimate the time required to complete the survey questionnaire and the length of time for questionnaire turnaround. To enhance validity and reliability of the instrument before the pilot test, it was scrutinized by the purchasing department staffs that were presumed to know purchasing more than other department, adjustments were done and then the supervisor also scrutinized. The pilot test involved selecting 1 respondent from every department and issuing them with the questionnaires. The data gathered from the pilot study was subjected to cronbach's alpha coefficient of reliability. An alpha coefficient of 0.7 was achieved that indicates that the gathered data has a relatively high internal consistency and could be generalized to reflect opinions of all respondents in the target population. After obtaining an alpha coefficient of higher than 0.7, questionnaires were issued to respondents.

4. RESEARCH FINDINGS AND DISCUSSION

4.1.1. Highest Education Level

The study sought to determine the highest education level of the respondents that were participating in the study. When the respondent were asked it was found out that a majority (63%) had degrees, 23% had masters and 14% of the respondents were certificate holders. This meant that all respondents had training in their area of specialization and therefore has the necessary understanding of both language and company operations from an expertise point. Their responses can hence be relied upon. A summary of the results is as shown in figure 4.1 below.

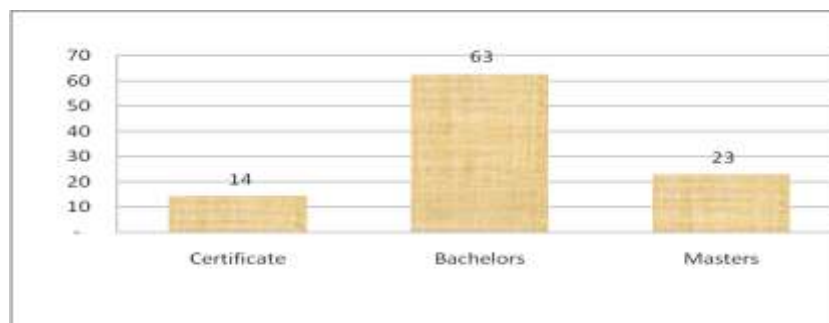


Figure 4.1: Respondents Highest Level of Education

4.1.2. Working Experience.

It was of importance to the study to determine how long the respondents had worked in the company. The duration of stay in the company was a basis of determining if the respondents understood the operations of purchasing department. It's assumed that the longer the stay the better the employee understands purchasing department operations. It was found

out that majority of the respondents (21) had stayed in the company for more than 16 years, 4 respondents had stayed for between 11 to 15 years, 6 had stayed for between 6 to 10 years and 4 respondents had stayed for less than 5 years. More than 30 respondents had stayed in the company for more than 5 years a period long enough to differentiate facts from malice rumors about the operations of purchase department. This means that data from respondents can confidently be termed to be facts about the operation of purchasing department.

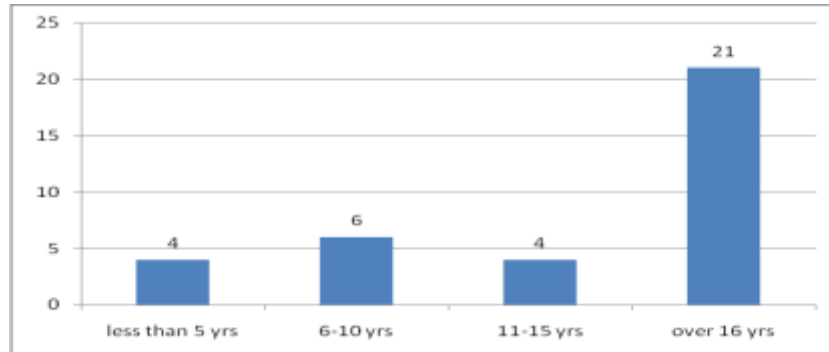


Figure 4.2: Respondents Working Experience

4.1.3. Reliability Analysis

Cronbach’s Alpha was used for testing the reliability of the questionnaire responses, using SPSS software. The critical point for Cronbach’s Alpha is 0.7, and in this case the average score for all variables was found to be 0.858. From the test, one can safely conclude that the results are reliable and stable, as indicated in Table 4.1 below. An alpha coefficient higher than 0.7 indicates that the gathered data has relatively high internal consistency and could be relied upon to assess the factors affecting the effectiveness of purchasing function of Nzoia Sugar Company.

Table 4.1 Reliability Analysis

	Case Processing Summary	Reliability Statistics	
	N	Cronbach's Alpha	N of items
Valid	35	0.828	22
Excluded a	0		
Total	35		

4.1.4. Respondents Department

The study further sought to determine the department that the respondents were serving in at the time of data collection. It was found out that 17.1% of the sampled respondents were from finance department 14.35% were from agriculture department, another 14.3% were drawn from production and 11.4% were from human resource department. The remaining respondents were drawn from various departments as shown in table 4.2 below. Respondents for the study were drawn from 11 departments of the company which is a representative sample of all the departments hence data collected from them is representative of the company’s view of the issue that was being studied.

Table 4.2 Respondents Department

	Frequency	Percent
Human Resources	4	11.4
Factory	3	8.6
Agricultural Services	1	2.9
Public Relations	2	5.7

Finance	6	17.1
Production	5	14.3
General Administration	3	8.6
IT	3	8.6
Sales & Marketing	1	2.9
Agriculture	5	14.3
Internal Audit	2	5.7
Total	35	100.0

Based on the information provided above, it is sufficient to assume that most of the respondents have been in the organization for more than five years which the researcher considers a long period, with high education levels; the purchasing function is not strange to the respondents because of interdepartmental interactions, and the perceived significance of procurement to the entire organization. The next sections attempt to answer the research questions on purchasing effectiveness.

4.2.0. Effectiveness of Purchasing Department

The core duty of the study was to determine the effectiveness of purchasing department. To determine this, the study asked respondents about the extent to which the department was effective. Majority of the respondents (57.1%) stated that purchasing department was effective to a large extent, 20.0% to a moderate extent, 20.0% to a very large extent and 2.9% to a small extent. Purchasing effectiveness is the extent to which, by choosing a certain course of action, a previously established goal or standard can be met. It is the relationship between actual and planned performance and as per respondent's response, it can be concluded that procurement processes as executed by purchasing department are above average as shown in table 4.3 below.

Table 4.3 Extent of Effectiveness of Purchasing Department

	Frequency	Percent
Small extent	1	2.9
Moderate extent	7	20.0
Large extent	20	57.1
Very large extent	7	20.0
Total	35	100.0

4.2.1. Purchasing Interaction with other Internal Departments

One of the objectives of the study was to assess how the level of purchasing interaction with other internal departments in the public sugar sector impacts on its effectiveness. In pursuing this objective respondents were asked if they had any challenges interacting with the purchasing department. Majority of the respondents (91.4%) reported to have challenges in their interaction with purchasing department and 8.6% reported otherwise. As a follow up questions respondents asked their opinion if purchasing departments interaction with other departments affects its effectiveness. Most of them (82.9%) agreed that indeed relations among departments affect purchasing department effectiveness while 17.1% had a contrary opinion. They felt that interaction among departments does not affect effectiveness of purchasing department. For better understanding of interactions between purchasing departments and other departments respondents were asked to state the level of interaction on various aspects of procurement. On a scale of 1 for not at all, 2 for small extent, 3 for moderate extent, 4 for large extent and 5 for very large extent the following were the mean responses. Respondents as per table 4.4 below, reported with a mean of 3.97 that to a large extent purchasing department is involved in other departments'

projects, and they also reported with a mean of 3.06 that on a moderate extent other departments contact purchasing department to get information about lead times. It was further found out that to a moderate extent, mean of 2.77, purchasing department provides reasonable and timely explanations on delays to other departments, however they only provide orders status reports on a small extent, this is as indicated by a response mean of 2.31 on the statement. Understanding the goals of various departments, including marketing, sales and research and development, can help improve efficiency and develop better processes to ensure goals are met.

Table 4.4 Purchasing Department Interaction with other Internal Departments

	Mean
Involvement of purchasing in other departments projects	3.97
Purchasing is contacted about lead times	3.06
purchasing provides reasonable and timely explanations on delays	2.77
Purchasing provides orders status reports	2.31

4.2.2. Delegated Authority to Purchasing Department

The study endeavored to find out how the level of delegated authority to purchasing department by other internal departments in the public sugar sector impact on its effectiveness. In this endeavor respondents were asked several questions. When it was inquired about the level of purchasing department in decision making, majority (45.7%) reported that it was at the strategic level, 40.0% reported it to be at the operational level and 14.3% stated that it was at the tactical level. At the strategic level the department is able to represent itself and influence decisions. It could also be argued that a department may be significant and not strategic. Whichever option one takes, purchasing function is perceived as significant in this study according to the responses in table 4.5 below.

Table 4.5 Level of Delegated Authority to Purchasing Department

	Frequency	Percent
Strategic	16	45.7
Operational	14	40.0
Tactical	5	14.3
Total	35	100.0

When it was inquired from the study respondents if the authority given to purchasing department by other departments affects its effectiveness in supply chain management practices, 74.3% agreed that it affects its effectiveness while 25.7% were of the contrary view that it did not affect its effectiveness. Concerning the opinion of respondents on issues of delegation the study presented several statements to them and sought their responses. On a scale of 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree the following was what was found out. Respondents agreed with a mean of 4.11 that putting purchasing department at par with other departments increases its effectiveness; they also agreed with a mean of 4.06 that signing service level agreements with other departments improves its effectiveness. Respondents agreed with a mean of 4.00 that inadequate internal status and support impairs purchasing department effectiveness, they also agreed that by giving purchasing department powers to sign low value orders improves their delivery, this as indicated by the response mean of 3.83 as shown by table 4.6 below.

Table 4.6 Respondents Opinion on Issues of Delegation of Authority to Purchasing Department

	Mean
Putting purchasing at par with other departments increases its effectiveness	4.11
Signing service level agreements with other departments improves its effectiveness	4.06
Inadequate internal status and support impaired purchasing effectiveness	4.00
By giving purchasing powers to sign low value orders improves their delivery	3.83

4.2.3. Purchasing Task Execution

The study aimed at assessing how the level of purchasing activity execution as set out in the Public procurement Act impacts on purchasing effectiveness in the public sugar sector. A series of items were presented to respondents with an aim to collect data for this objective. When they were asked if purchasing department professionally executes its functions, 77.1% agreed that they do while 22.9% felt they don't execute their functions professionally. In order to get some more detailed information about the response above the study presented several statements as presented below that respondents were to rate. On a scale of 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree the following were the responses. The respondents neither agreed nor disagreed with the all the statements that were presented to them. On all aspects respondents were neutral on statements that purchasing department; portrays positive attitude, helps the company comply with capital purchase budget, maintains expertise in NSC purchasing procedures, have professionals available to discuss issues, correctly understands other departments needs, portrays a quality image, selects best suppliers, responds quickly to problems, obtains ordered items on time and helps other departments keep low costs with means as indicated in the table 4.7 below.

Table 4.7 Respondents Opinion on Issues of Task Execution of Purchasing Department

	Mean
Purchasing portrays positive attitude	3.34
Purchasing helps the company to comply with capital purchase budget	3.03
Purchasing maintains expertise in NSC purchasing procedures	3.03
Qualified purchasing professionals are available to discuss issues	3.00
Purchasing correctly understands other department's needs	3.00
Purchasing portrays a quality image	2.86
Purchasing selects best suppliers	2.77
Purchasing responds quickly to problems	2.63
Purchasing obtains ordered items on time	2.57
Purchasing helps other department keep low costs	2.54

4.2.4. Supplier Relationship Management

The final objective of the study was to assess the effect of supplier relationship management on the effectiveness of purchasing department in the public sugar sector. The study sought to find out if the organization face supplier relationship management challenges, majority of the respondents 88.6% said that these challenges were there while 11.45% reported that they were not there. When they were further asked if supplier relationship management affect the effectiveness of supply chain management practices in the organization, 97.1% agreed that it affects and only one respondent 2.9% felt otherwise, that it does not affect. An inquiry concerning aspects supplier relationship activities was done. On a scale of 1 for not at all, 2 for small extent, 3 for moderate extent, 4 for large extent and 5 for very large extent the respondent's scores were analyzed. It was found out that purchasing department was moderate on all the statements;

good relationship with suppliers ensures quality, purchasing practices effective supplier collaboration strategies, purchasing practices effective supplier development strategies and purchasing offers good customer care services to suppliers. The mean respondents score on each of the statements was as shown in the table 4.8 below.

Table 4.8 Responses on Supplier Relationship Management

	Mean
Good relationship with suppliers ensures quality	3.57
Purchasing practices effective supplier collaboration strategies	3.49
Purchasing practices effective supplier development strategies	3.11
Purchasing offers good customer care services to suppliers	2.91

4.2.5. Relationship between Variables

For meaningful analysis inferential statistics was carried out using regression model to establish the effect of independent research variables on the dependent variable. Regression model established extent to which each of the dependent variable explained the independent variable. From the findings as shown by table 4.9 below, the level of task execution explained 43.1% of purchasing department’s effectiveness, level of supplier relationship explained 20.9% and interaction level explained 2.2%, level of purchasing department in decision making had a negative relation with its effectiveness as it explained -4.1% of the effectiveness of the department. This means that the more autonomous purchasing department becomes the less effective it will be. Based on significance values the study found out that level of task execution significantly explains the effectiveness of purchasing department. This is as indicated by the significance value of 0.019 as indicated in the table below. All together the four independent variables explain 62.1% of purchasing department effectiveness; the rest can be explained by other factors that were not considered by the study.

Table 4.9 Regression Analysis Results

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.087	0.631		3.308	0.002
Purchasing Dpt Interaction	0.023	0.183	0.022	0.125	0.902
Purchasing delegated authority	-0.032	0.131	-0.041	-0.244	0.809
Purchasing Task Execution	0.461	0.186	0.431	2.479	0.019
Purchasing Supplier Relationship	0.16	0.127	0.209	1.266	0.215

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1.0. Summary of Findings

The study aimed at assessing selected non financial factors that affect the effectiveness of purchasing function in the public sugar sector guided by four specific objectives; to find out how the level of purchasing interaction with other departments impacts on its effectiveness, to find out how the level of Purchasing delegated authority impacts its effectiveness, to find out how the level of Purchasing activity Execution impacts its effectiveness and to find out how the

level of supplier relationship management practices impacts on purchasing function effectiveness. The four variables were found to have an effect on effectiveness of purchasing function in the public sugar sector.

5.1.1. Purchasing interaction.

From the study it can be seen that Purchasing interaction with other departments within Nzoia Sugar greatly determines its effectiveness as most of them (83%) agreed that indeed interaction among purchasing department and other departments affect purchasing department effectiveness, but further confirmed at the time of the study, majority said that there are challenges of interaction between purchasing department and other departments. The respondents said that there lacked interaction in form of regular meetings, internal memos, telephone calls, internet services etc. Interaction among department fosters some level of friendly attitude that allows purchasing to easily enquire any gray issue from any member of the company without any among them have reservations. Because purchasing is blamed for any delay or unmet targets by the company, purchasing department being a service department should be at the forefront to forge for interaction. Purchasing should prepare and distribute daily, weekly, monthly or quarterly reports on the status of all purchase orders, by customer. Changes in and deviations from customer required dates should be documented. Communication problem between purchasing and its customers causes delays and leads to a blame game between them. This concurs with the findings of Giunepero that Purchasing's customers could be planning start dates for projects, programming equipment replacements, and scheduling preventive maintenance on the assumption that the needed materials will arrive by the date requested. The buyers, on the other hand, seldom compares the customer required date with the supplier promised date, and do not communicate with the customer when the two dates differ, (Giunepero and Vogt 1997, p.10).

5.1.2. Purchasing delegated authority.

The study evidenced that the level of authority given to purchasing department affects its effectiveness in supply chain management practices, 74.3% of the respondents agreed that it is true. Also the study established that the level of purchasing department in decision making in Nzoia sugar as per respondents, 45.7% reported that it was at the strategic level, 40.0% reported it to be at the operational level and 14.3% stated that it was at the tactical level. At the strategic level the department is able to represent itself and influence decisions. It could also be argued that a department may be significant and not strategic. As a firm recognizes the purchasing function as an important resource for obtaining high quality levels, fast deliveries and cost savings, it reveals opportunities for the purchasing management to become a key contributor. The top management support has a significant impact in the way the function is perceived, and that perception induces the purchasing involvement in strategic decisions. Purchasing department in Nzoia reports directly to the MD and it is equal to other departments. It has its own budget. Depending on the role of the purchasing function, the effectiveness of procurement is determined. In the case of the role being weak and non participative, the effects stay quite low. On the contrary when the procurement role is strong, the effectiveness becomes higher and more visible. It was found out that in Nzoia, the purchasing manager cannot approve or issue an order of any amount alone to any supplier. This impairs purchasing effectiveness by causing delays and receives blame from other departments. From the study, the department was portrayed by a respondent as *"not understanding that they work for other departments and not on their own"*, another one equipped *"purchasing people never meet delivery targets and when you inquire the status of your order, they say that they are busy"*. This proves as regards the percentage given to strategic, tactical and operational. This conforms also to the inferential statistics done above that purchasing authority contributes to its effectiveness by -4.1% meaning that the more autonomous purchasing department becomes the less effective it will be, hence other departments may not delegate any further authority to them but instead a bit of some delegated authority should be snatched. White and Hanmer-Lloyd's data analysis (1999) found that a purchaser is likely to be significantly impaired from achieving a significant strategic role by inadequate internal status and trust, and by the supportive involvement and influence of the firm's CEO.

5.1.3. Purchasing Task execution.

Good execution of tasks given to purchasing means targets are met within time and other departments are able to work as planned. When respondents were asked if purchasing department professionally executes its functions, 77% agreed that they do, asked to comment on matters of professionalism such attitude, image, procedures, selection of suppliers, delivery time and costs, respondents were neutral. Tasks allocated to purchasing are presumed to cover the complete

supply chain line from procurement planning, sourcing, tendering up to delivery and payment for goods and services. From the study, other department feels that purchasing is executing its tasks as par the Public Procurement & Disposal Act. A few, 23% felt that purchasing did not execute their tasks as require by sighting things such as delayed delivery of goods and services, not giving reports and that purchasing has a don't care attitude and they do what they wish but not as par requests from departments. For example one of the respondents said "*the factory is here to mill cane but not stories given by purchasing*" As per Chiang-nan *et al*, other Purchasing Task execution items are subjective that can be evaluated only by judgment based on observation; thus, they are qualitative in nature. They include, 1) Professionalism- How well purchasing upholds standards of conduct, ethics, convention, courtesy, and attitude, 2) Negotiating ability-How well buyers can negotiate prices, terms of sales, delivery dates, and other conditions with suppliers, 3) Commodity knowledge-How well buyers know the items, suppliers, prices, and so on for which they are responsible,(Chao, Chiang-nan; Scheuing, Eberhard E.; Ruch, William A, June 22,1993).

5.1.4. Purchasing supplier relationship.

The study findings showed that supplier relationship management greatly determined the effectiveness (97% agreed) of purchasing practices in Kenya public sugar sector. However the company faces supplier challenges as indicated by 89% of the respondents and the biggest challenge is lack of timely payment to suppliers which in turn affects delivery of goods and services. In any organization, purchasing department is the link between a Company and the suppliers of goods and services. Communication to suppliers can take several ways such as through telephone, letters, purchase orders and contracts. It was identified that application of effective supplier relationship management strategies such as supplier collaboration and supplier development enhanced effectiveness in the execution of organizational supply chain functions. The study noted that supplier relationship management is part of the information flow component of supply chain management and supplier relationship management practices creates a common frame of reference that enables effective communication between an purchasing and suppliers. As a result, SRM increases the effectiveness of processes associated with acquiring goods and services. The study noted that lack of a comprehensive approach for managing interactions with suppliers affected realization of increased effectiveness on supply chain processes between an organization and the suppliers. This concurred with findings by Browne (2004) that supplier relationship management is a comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses. The goal of supplier relationship management (SRM) is to streamline and make more effective the processes between an enterprise and its suppliers. The respondents explained that the organization lacked measures for working collaboratively with suppliers hence affecting the development of a two-way, mutually beneficial relationship with strategic supply partners. This was contended with findings by Lee (2002) that SRM is a discipline of working collaboratively with those suppliers that are vital to the success of organization to maximize the potential value of that relationship. SRM is about developing two-way, mutually beneficial relationships with your most strategic supply partners that deliver greater levels of innovation and competitive advantage than could be achieved by operating independently.

5.2. Conclusion

From the findings level of task execution explained 43.1% of purchasing department's effectiveness, level of supplier relationship explained 20.9% and interaction level explained 2.2%. Level of purchasing department in decision making had a negative relation with its effectiveness. It explained -4.1% of the effectiveness of the department meaning that the more autonomous purchasing department becomes the less effective it will be. Based on significance values, the study found out that level of task execution significantly explains the effectiveness of purchasing department, as indicated by the significance value of 0.019. All together the four independent variables explain 62.1% of purchasing department effectiveness; the rest can be explained by other factors that were not considered by the study. To ensure value for money, there should be continuous improvement in the effectiveness of internal processes and systems and public entities should maintain structures that avoid unnecessary costs. As much as quality of procured goods and services feature as the most preferred measure of purchasing effectiveness, other intangible measures like timely delivery of orders, customer satisfaction, dependability, flexibility and quality of employees should not be ignored. Although specific results of this study are not generalizable per se, the structure of the research should be of interest to other public sugar factories and indeed to purchasing practitioners. It would be appropriate for any public entity to conduct a similar study on the effect of

non financial factors on the effectiveness of purchasing and other factors that could be used to measure effectiveness of a purchasing function.

5.3. Recommendations

The effectiveness of supply chain management practices in the public sector depends on application of modern interaction strategies with other departments, purchasing delegated authority, effective task execution and supplier relationship management strategies. For public sugar sector to realize increased efficiency and effectiveness in the delivery of services, these factors must be put into consideration during execution of supply chain management functions.

5.3.1. Purchasing interaction.

For improved Interaction with other departments, Purchasing can employ the “five step internal customer strategy” The purchasing function need to continually work to keep the atmosphere in the workplace upbeat, positive, and happy. Improved communication strategies will greatly boost and galvanize interaction. Interaction can be effected by regular meetings, briefings, memos, internet and even social meetings outside working hours.

5.3.2. Purchasing delegated authority.

Purchasing department can request for delegated authority for goods and services below a certain amount. The level granted to purchasing department requesting authority will be based on requirements such as: Thoroughness of policies and procedures submitted for each type of purchasing authority requested; Completeness of training plan as submitted; Prior compliance or commitment to reporting requirements of the purchasing authority program. Purchasing can increase effectiveness by training and being members of professional bodies such as CIPS and KISM. Attend seminars offered by PPOA and benchmarking with other similar organizations. Lack of professional trained staff on supply chain management lowers the level of effectiveness on SCM practices since employees lack competitive skill on effective implementation of SCM strategies. Once purchasing masters the processes and shows competence, gains confidence from internal workers, authority delegated to them will increase.

5.3.3. Purchasing Task execution.

Integration of supply chain management tasks with information technology can help to speed up decision making process between the supply chain management partners through shared information. This eases communication process and creates a favorable environment for the application of Information technology systems like Enterprise Resource Planning (ERP) and Electronic Data Interchange (EDI). Orders, processes, deliveries, receipts and matching of invoices and orders if done in and ERP system, delays will be eliminated and task execution will improve. For all this to happen, warehouses should be put under purchasing department to ensure that the supply chain is complete. Currently the warehousing function in public sugar sector reports to finance department which makes receiving of goods have challenges as well as matching orders and invoices.

5.3.4. Purchasing supplier relationship.

Supplier relationship activities play important role as both parties willingly share risks and rewards and maintain relationship on long term basis. This strengthens the supplier collaboration and encourages supplier development. Relationship is two not one way; it should benefit both the purchasing organization and the supplier to that organization. The purchasing manager to be effective, he must get quality goods, in time deliveries and at the best price. On other hand the supplier should get information and commitment in time to prepare a delivery and payment as par the contract agreement and create a partnership in the spirit of a win –win situation to both. To manage supplier relationship, purchasing should intensify centralization of common user items and create a data base on supplier activities such as delivery schedules, complaints, quality management processes. A supplier scorecard can be used to help purchasing to better manage the supplier relationship and reduce risks associated with incompetent suppliers. The procurement managers in the organization should increase the level of interaction with suppliers. The interaction should involve efficiently performing suppliers with expectations of how the communications and flow of products/services are to be provided. SRM should involve effective categorizing the procurement and supply markets of products and services and follow-ups to meet measurable performance goals.

5.4. Areas for further research

The study concentrated on the four major non financial factors affecting the organizations' purchasing function that explain 62.1% purchasing effectiveness and did not cover 37.9% of other supply chain factors affecting purchasing effectiveness in public sugar sector organizations. The study noted that there existed other factors like procurement regulations, quality standards, sourcing strategies that also had an impact on the effectiveness of the supply chain management functions that can be studied. The researcher further recommends a study on the implementation of non financial factors in purchasing effectiveness measures, challenges encountered when measuring purchasing on non financial factors in achieving targets, benefits of measuring purchasing performance by use of non financial factors and finally, deeper analysis of purchasing effectiveness.

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