

**PROCUREMENT PROCEDURES AND SUPPLY DELIVERY IN
AFRICAN UNION-UNITED NATIONS HYBRID
OPERATION IN DARFUR (UNAMID),
REPUBLIC OF SUDAN**

A Thesis

Presented To The

College of Higher Degrees and Research

Kampala International University

Kampala, Uganda

In Partial Fulfillment of the
Requirement for the Award of the Degree of
Master of Business Administration,
Procurement

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OCTOBER, 2012



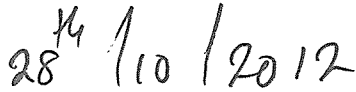
DECLARATION A

I, the undersigned declare that this Thesis "***Procurement Procedures and Supply Delivery in African Union-United Nations Hybrid Operation in Darfur (UNAMID), The Republic of Sudan***" is my own original compilation and has never been presented to any organization or institution of higher learning either as a paper or for any academic award. And it is now ready for submission to the College of Higher Degrees and Research in partial fulfillment of the requirement for the award of the Degree of Master of Business Administration".



S. GAVRIL SALL

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Date

DECLARATION B

"I/We confirm that the work reported in this Thesis was carried out by the candidate under my/our supervision".

.....

DR. YAHAYA IBRAHIM

(SUPERVISOR)

Date

APPROVAL SHEET

This thesis entitled *Procurement Procedures and Supply Delivery in African Union-United Nations Hybrid Operation in Darfur (UNAMID), The Republic of Sudan* prepared and submitted by **Mr. GAVRIL S. SALL** in partial fulfillment of the requirements for the degree of Degree of Master of Business Administration-Procurement and Supplies has been examined and approved by the panel on oral examination with a grade of **PASSED**.

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DEDICATION

I dedicate this piece of work to the Almighty God and to my family, most especially my Mom Julia Joe-Sall, my Wife Apu Richards-Sall my daughters, Ms. Naomi Gavrilyn Sall, Ms. Gavril Nyeaneh Sall and my son Mr. Solomon Gavril Sall, II as well as, Colleagues in UNAMID Procurement Section among others who played a very fundamental role in shaping and guiding me from and throughout my academic endeavors.

ACKNOWLEDGEMENT

The researcher wish to thank the Almighty God for giving me the strength, grace, opportunity and mercy in accomplishing this work. All that we know is a sum total of what we have learned from all who have taught us, either directly or indirectly.

The researcher is forever gratified to the countless outstanding Kampala International University management who by their commitment and dedication to becoming the best they could be, have inspired me to do the same.

Dr. Novembrieta R. Sumil (DVC-CHDR) thank you very much for your outstanding contribution to our institution.

Dr. Emmanuel O. Sumil and Alhajji with your team/panel member we respect sir.

Hassan Basajjabalaba for streamlining this great College/institution may you live to blow a thousand candles.

The researcher thank his Research Supervisor Dr. Yahaya Ibrahim whose constructive criticisms, guidance and valuable comments enabled me to complete the thesis.

Nevertheless, the researcher wishes in a special way to extend my sincere gratitude to my family, friends among my workmates.

The researcher, also thank the two anonymous reviewers for their comments on the final version of this Thesis.

Special thanks to staff of African Union-United Nations Hybrid Operation in Darfur (UNAMID) for all the assistance they rendered to me while gathering data for this study.

It is not possible to mention all people whose contribution in one way or another has enabled me to complete this piece of work, suffice to note is that I am sincerely grateful to all those who rendered their assistance to enable me accomplish this task.

Finally, The researcher thank all those who contributed to the outcome of this piece of work whose names would not appear here because of space and am appreciative to you all and may the Almighty God bless you.

ABSTRACT

The study intended to establish the relationship between Procurement Procedures and Supply Delivery in African Union-United Nations Hybrid Operation in Darfur (UNAMID), Darfur, Sudan. It was guided by four objectives which included determining:- Demographic profile of the respondents; Level of procurement procedures; the extent of supply delivery and the significant relationship between the level of procurement and the extent of supply delivery in African Union-United Nations Hybrid Operation in Darfur. Researcher made questionnaire was used to collect data from 150 business owners selected purposively. A descriptive correlational, cross-sectional and ex-post-facto design were used. Data analysis was done using frequencies, percentages, means, and Pearson linear correlation coefficient (PLCC) were used to analyse data. The findings indicated that most respondents were male (62.0%), aged between 20-39 years (57.3%), married (53.3%), had Diploma (44.7%). All aspects of supply delivery were found to be high for example overall (mean=2.74). All aspects of on procurement procedure in organizations are generally high with a mean of 2.77 as the overall mean index (Grand average mean). Procurement procedures were found to be positively and significantly correlated with service delivery for example procurement criteria ($r=0.270$, $\text{sig}=0.001$), tendering criteria ($r=0.502$, $\text{sig}=0.001$), experience in supplier ($r=0.610$, $\text{sig}=0.001$). The researcher recommended that; Make it imperative for executives and risk managers to reassess how they manage the growing number of risks; establish an effective monitoring and evaluation of the Procurement systems; emphasize the importance of consistent political commitment and support from the highest levels of government; place risk managers at the heart of the supply chain process; develop an effective quality strategy built on the strengths and core competencies; address some of the immediate concerns of the staff so that elements of corruption, selfishness and personal intrigue can be overcome; establish the concept of quality as the foundation stone on which the culture and structure of the organisation is built; effectively screen the people being offered employment; maintain complete, accurate, and forward looking supplier information; building short-term resiliency at the cost of long-term vulnerability; seek for advice from properly qualified people; identify risk mitigation strategies; train well-rounded and effective procurement specialists; contracting authorities should be aware of potential conflicts of interest in the tendering process and should take appropriate action to avoid them. The researcher concludes that the levels of Procurement procedure and Supply Delivery in UNAMID, Darfur, Sudan were both generally high. Once the above aspects are attended to, Procurement procedure to UNAMID, Darfur, Sudan is very useful vice in Supply Delivery. Thus, the governing body of African Union-United Nations Hybrid Operation in Darfur under study should thoroughly look into the weak points both in the practice of procurement procedures and supply delivery and identify ways on how to enhance and rectify further on these areas.

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ACRONYMS

CBS	Cash before shipment
CND	Cash next delivery
CPAR	Country Procurement Assessment Report
CVI	Content Validity Index
CWO	Cash with order
EDI	Electronic Data Interchange
ERP	Enterprise resource planning
FASB	Federal accounting standards board
FSA	Financial Service Authority
GAAP	Generally Accepted Accounting Principles
GMP	Good Manufacturing Practices
ISO	International Standards Organization
LS	Logistic Support
PIA	Payment in advance
PLCC	Pearson linear correlation coefficient
PO	Purchase Order
PPDA	Public Procurement and Disposal of Public Assets
PSC	Product Selection Committee
QMS	Quality Management System
RFP	Request for Proposal
RFQ	Request for Quotation
RFT	Request for Tender
ROA	Return on Asset
SCM	Supply Chain Management
SPSS	Statistical Package for Social Science
UN	United Nations
UNAMID	African Union-United Nations Hybrid Operation in Darfur

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the Study

Procurement capability intensification is strongly linked to the extensive concerns of political and social change and good governance. Thus, capacity building coupled with the enhancement of professionalism is a continuing procedure (Weele, 2005). The circumstances surrounding the maintaining of records have upshot the need for an all-inclusive data on the cost of goods and services procured and subsequently on key factors as provided for under Procurement Procedure (Weele, 2005). The inadequate use of electronic commerce has worsened the issue of record management. Similarly, one cannot rule out the problems of political hindrance with the Procurement procedure for the most part, at municipality level. The inadequate implementation of Public Procurement power and the overlapping of authorizations with other organizations require close cooperation in the achievement of capacity advancement strategies (Weele, 2005).

UNAMID continues to face shortfalls in troops and critical transport and aviation assets. The Secretary-General has led appeals to the international community to provide the mission with the capabilities it needs, especially helicopters, so that it can fulfill its mandate and live up to the expectations of the people of Darfur and the international community. In the meantime, UNAMID is doing all in its power and with limited resources to provide protection to civilians in Darfur, facilitate the humanitarian aid operation, and help provide an environment in which peace can take root (Tumutegyeize, 2004)

Procurement capability intensification is strongly linked to the extensive concerns of political and social change and good governance. Thus, capacity building coupled with the enhancement of professionalism is a continuing procedure. The circumstances surrounding the maintaining of records have

upshot the need for an all-inclusive data on the cost of goods and services procured and subsequently on key factors as provided for under Procurement Procedure. The inadequate use of electronic commerce has worsened the issue of record management. Similarly, one cannot rule out the problems of political hindrance with the Procurement procedure for the most part, at municipality level. The inadequate implementation of Public Procurement procedures and the overlapping of authorizations with other organizations require close cooperation in the achievement of capacity advancement strategies (University of Gloucestershire Procurement Manual 2006).

Statement of the Problem

The UN procurement procedures identify the processes by which, suppliers are invited to submit a tender, a proposal, qualification information, or a response to a request for information and includes the ways in which those tenders, proposals or information submissions are treated. This research is focused on efficiency of the UN procurement procedures as practiced in UNAMID Procurement Section in attaining lead time as it relates to service delivery. Effective public procurement systems are systems that offer high levels of transparency, accountability and value for money in the application of a procurement budget. Such an effective public procurement is critical to poverty eradication. However despite the good intentions of the reforms, there is scanty information to show how the employment of professionalism, use of institutional mechanism and legislation had contributed to addressing the core challenges in public procurement that is to say attainment of procurement outcomes of right quality, right costs and timely delivery. A lot of companies suffer as the result of poorly executed cost reduction effort. While they achieve their financial objectives, morale declines, cuts go too far into organizational muscle and processes don't change. People just work harder. However, done well, managers and staff will see that things really changed and that the company has new capabilities. These capabilities give the organization a voice and lead to a continuous improvement process in which

everyone can participate. Some companies attempt to shed old habits and begin to view procurement as a strategic resource from which competitive advantage can be gained, there is a great deal of corporate baggage that must be shed. More importantly, there is a new mindset that must be instilled both in procurement and across the firm. Strategic supply symbolizes the importance of enterprise wide thinking where functional units inside the firm and key suppliers from the firm's supply chain all work in concert to bring value to the marketplace. There is a need to address some of the barriers to implementing such supply strategy. These barriers exist inside the firm as well as between the firms at its key suppliers and acknowledge that progress is being made, however the data suggest that the journey is far from over. It is against this background that the researcher went ahead and assesses the level of procurement procedures and supply deliver in UN/UNAMID.

Purposes of the study

The following are the reasons why this study was conducted;

- (1) to test the hypotheses of no significant relationship between the level of procurement procedure and the extent of supply delivery;
- (2) to validate existing information related to the Theory of Constraints Cost Accounting Eliyahu M. Goldratt (2008) to which this study is based;
- (3) to generate new information based on the findings of the study;
- (4) to bridge the gaps identified in the previous studies.

Research Objectives

General: To investigate the correlation between procurement procedures and supply delivery in UNAMID, Darfur, Sudan

Specific: Further, this study determined the

- (i) Demographic profile of the respondents in terms of: gender, age, educational qualification post/position in the organization and length of experience in procurement and supply activities

- (ii) to determine the Level of procurement procedures in UNAMID, Darfur, Sudan
- (iii) To establish the extent of supply delivery in UNAMID, Darfur, Sudan
- (iv) To determine whether there a relationship between the level of procurement and the extent of supply delivery in UNAMID.

Research Questions

1. What is demographic profile of the respondents in terms of: gender, age, educational qualification post/position in the organization and length of experience in procurement and supply activities?
2. What is the level of procurement procedures in UNAMID, Darfur, Sudan?
3. What is the extent of supply delivery in UNAMID, Darfur, Sudan?
4. Is there a significant relationship between the level of procurement and the extent of supply delivery in UNAMID?

Hypotheses

There is no significant relationship between Procurement Procedures and supply delivery of the African Union-United Nations Hybrid Operation in Darfur (UNAMID), the Republic of Sudan.

Scope of the Study

Geographical Scope

The study was carried out in the African Union-United Nations Hybrid Operation in Darfur (UNAMID), the Republic of Sudan. UNAMID is an organization in the public sector which, is among the central government procurement and disposal entities. The variables that are analyzed here include improved professionalism, improved institutional mechanism, improved legislation and change of management principles that are applied as an intervening factor for the period 2010 to December 2012.

Theoretical Scope

This study based on the Theory of constraints cost accounting Eliyahu M. Goldratt (2008) developed the Theory of Constraints in part to address the cost-accounting problems in what he calls the "cost world." He offers a substitute, called throughput accounting, that uses throughput in place of output and considers labor as a fixed rather than as a variable cost. He defines inventory simply as everything the organization owns that it plans to sell, including buildings, machinery, and many other things.

Content Scope

The study was confined to the Procurement Procedures and Supply Delivery terms of procurement criteria, tendering criteria, and experience of the suppliers in UNAMID, Darfur, Sudan.

Time Scope

The study has been conducted within one year. It started with a proposal development between April 2011 to July, 2011 The next activity was formulating chapters three and four of the study wherein the data gathered from the survey is integrated and the analysis of the data included in the research. This has taken place with in February 2012 and April, were for writing a final report and in August 2012 the final report was defended, finally mid October, 2012 the final Thesis was defended.

Significance of the Study

University it is one of the fulfillment of partial requirements for the award of the Degree of Master of Business Administration-Procurement and supplies.

Policy makers, lessons learned from experience which policy makers would formulate future procurement reform policies and procedures.

Supply and value chain managers, research is significant to supply and value chain managers which use procurement procedure often as a result of cost reduction tactics and considerations. Thus, is significant also to

manufacturing consultants and experts of procurement process and its management cues.

Organizations; the study improves improve awareness on some of the challenges faced by organizations in the course of undertaking procurement procedures/policies and practices in relation to supply delivery.

Government; Data collected is needed to enable firms to make sound planning decisions and control their operations and firms that employ these research ideas effectively can take advantages of their opportunities and thus gain ground on their competitors.

Scholars; the findings act as source of literature review to other researchers wishing to carry out a study in the same field.

Operational Definitions of Key Terms

Procurement refers to the acquisition of goods or services. It is favorable that the goods/services are appropriate and that they are procured at the best possible cost to meet the needs of the purchaser in terms of quality and quantity, time, and location

Procurement Procedures refers to the processes by which suppliers are invited to submit a tender, a proposal, qualification information, or a response to a request for information and includes the ways in which those tenders, proposals or information submissions are treated.

Request for proposal refers to a solicitation made, often through a bidding process, by an agency or company interested in procurement of a commodity or service, to potential suppliers to submit business proposals.

Request for quotation refers to a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services. Request for Quotation, generally means the same thing as Invitation for bid.

Request for tender refers to a formal, structured invitation to suppliers for the supply of products or services.

Request for information refers to a standard business process whose purpose is to collect written information about the capabilities of various suppliers.

Delivery refers to the process of transporting goods. Most goods are delivered through a transportation network. Cargo are primarily delivered via roads and railroads on land, shipping lanes on the sea and airline networks in the air.

Supply refers to the amount of some product producers are willing and able to sell at a given price all other factors being held constant

Supply Delivery refers to relationship between the lead time and actual period it takes for manufacturer to comply with component suppliers have become increasingly crucial, and have come under increasing stress in the past three years as soaring demand has required faster ramp-up times, larger investments and greater agility to capture value in a rapidly growing sector.

Demographic Profile refers to most recent statistical characteristics of a population under study in terms of gender, education levels, age, disabilities, mobility, home ownership, employment status, and even locations. *Demographic trends* describe the historical changes in demographics in a population over time for example, the average age of a population may increase or decrease over time.

Preprocessing Lead Time also known as "planning time" or "paperwork": refers to the time required to release a purchase order or create a job if you manufacture an item from the time you learn of the requirement.

Processing Lead Time: according to the study, it is the time required to procure or manufacture an item.

Post processing Lead Time: refers to the time to make a purchased item available in inventory from the time you receive it (it includes quarantine, inspection, among others.)

CHAPTER TWO

REVIEW OF RELATED LITERATURE REVIEW

Concepts, Ideas, Opinions from Experts/Authors

Procurement

Procurement refers to the acquisition of appropriate goods and/or services at the best possible total cost of ownership to meet the needs of the purchaser in terms of quality and quantity, time, and location (Cartel *et al.*, 2007). Corporations and public bodies often define processes intended to promote fair and open competition for their business while minimizing exposure to fraud and collusion (Monczka, 2005)

Procurement Procedures

Procurement procedures refers to the processes by which suppliers are invited to submit a tender, a proposal, qualification information, or a response to a request for information and includes the ways in which those tenders, proposals or information submissions are treated (Monczka, 2005).

Procurement steps

Procurement life cycle in modern businesses usually consists of eight steps: Information gathering: If the potential customer does not already have an established relationship with sales/ marketing functions of suppliers of needed products and services (P/S), it is necessary to search for suppliers who can satisfy the requirements (Goodwin *et al.* 2009). Supplier contact, when one or more suitable suppliers have been identified, requests for quotation, requests for proposals, requests for information or requests for tender may be advertised, or direct contact may be made with the suppliers; background review, references for product/service quality are consulted, and any requirements for follow-up services including installation, maintenance, and warranty are investigated. Samples of the P/S being considered may be examined, or trials undertaken; Negotiations are undertake, and price,

availability, and customization possibilities are established. Delivery schedules are negotiated, and a contract to acquire the Procurement and supplies is completed (Melvin *et al.*,2002).

Fulfillment, Supplier preparation, expediting, shipment, delivery, and payment for the P/S are completed, based on contract terms, installation and training may also be included; Consumption, maintenance, and disposal: During this phase, the company evaluates the performance of the P/S and any accompanying service support, as they are consumed; renewal, When the P/S has been consumed or disposed of, the contract expires, or the product or service is to be re-ordered, company experience with the P/S is reviewed. If the P/S is to be re-ordered, the company determines whether to consider other suppliers or to continue with the same supplier; additional Step - tender Notification: Some institutions choose to use a notification service in order to raise the competition for the chosen opportunity. These systems can either be direct from their e-tendering software, or as a re-packaged notification from an external notification company (Melvin *et al.*,2002).

Request For Proposal

A request for proposal refers to a solicitation made, often through a bidding process, by an agency or company interested in procurement of a commodity or service, to potential suppliers to submit business proposals. It is submitted early in the procurement cycle, either at the preliminary study, or procurement stage, the request for proposal process brings structure to the procurement decision and is meant to allow the risks and benefits to be identified clearly up front. The request for proposal presents preliminary requirements for the commodity or service, and may dictate to varying degrees the exact structure and format of the supplier's response. Effective request for proposal s typically reflect the strategy and short/long-term business objectives, providing detailed insight upon which suppliers will be able to offer a matching perspective (Goodwin *et al.* 2009).

Similar requests include a request for quotation and a request for information. In principle, an request for proposal: informs suppliers that an organization is looking to procure and encourages them to make their best effort. Requires the company to specify what it proposes to purchase. If the requirements analysis has been prepared properly, it can be incorporated quite easily into the Request document (Melvin *et al.*,2002). Alerts suppliers that the selection process is competitive. Allows for wide distribution and response. Ensures that suppliers respond factually to the identified requirements, is generally expected to follow a structured evaluation and selection procedure, so that an organization can demonstrate impartiality a crucial factor in public sector procurements.

Request for Quotation

A request for quotation is a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services. request for quotation, generally means the same thing as IFB (Invitation for Bid). An request for quotation typically involves more than the price per item. Information like payment terms, quality level per item or contract length are possible to be requested during the bidding process. To receive correct quotes, request for quotation often include the specifications of the items/services to make sure all the suppliers are bidding on the same item/service (Melvin *et al.*,2002). Logically, the more detailed the specifications, the more accurate the quote will be and comparable to the other suppliers. Another reason for being detailed in sending out an request for quotation is that the specifications could be used as legal binding documentation for the suppliers.

The suppliers have to return the bidding by a set date and time to be considered for an award. Discussions may be held on the bids. The bid does not have to mean the end of the bidding. Multiple rounds can follow or even a reverse auction can follow to generate the best market price(Goodwin *et al.* 2009).

Request for Tender

A request for tender is a formal, structured invitation to suppliers for the supply of products or services. In the public sector, such a process may be required and determined in detail by law to ensure that such competition for the use of public money is open, fair and free from bribery and nepotism. For example, a government may put a building project 'out to tender'; that is, publish an invitation for other parties to make a proposal for the building's construction, on the understanding that any competition for the relevant government contract must be conducted in response to the tender, no parties having the unfair advantage of separate, prior, closed-door negotiations for the contract. An evaluation team will go through the tenders and decide who will get the contract (Goodwin *et al.* 2009).

Request for Information

A request for information refers to a standard business process whose purpose is to collect written information about the capabilities of various suppliers. Normally it follows a format that can be used for comparative purposes. An RFI is primarily used to gather information to help make a decision on what steps to take next. RFIs are therefore seldom the final stage and are instead often used in combination with the following: request for proposal (RFP), request for tender, and request for quotation (RFQ). In addition to gathering basic information, an RFI is often used as a solicitation sent to a broad base of potential suppliers for the purpose of conditioning suppliers' minds, developing strategy, building a database, and preparing for an RFP, RFT, or RFQ. The RFI procedure is used in the construction industry in cases where it is necessary to confirm the interpretation of a detail, specification or note on the construction drawings or to secure a documented directive or clarification from the architect or client that is needed to continue work.

Consumer goods delivery

Most consumer goods are delivered from a point of production through one or more points of storage (warehouses) to a point of sale, where the

consumer buys the good and is responsible for its transportation to point of consumption. There are many variations on this model for specific types of goods and modes of sale. Products sold via catalogue or the Internet may be delivered directly from the manufacturer or warehouse to the consumer's home, or to an automated delivery booth (Melvin *et al.*, 2002). Small manufacturers may deliver their products directly to retail stores without warehousing. Some manufacturers maintain factory outlets which serve as both warehouse and retail store, selling products directly to consumers at wholesale prices (although many retail stores falsely advertise as factory outlets). Building, construction, landscaping and like materials are generally delivered to the consumer by a contractor as part of another service.

Supply Delivery

Supply delivery refers to relationship between the lead time and actual period it takes for manufacturer to comply with component suppliers have become increasingly crucial, and have come under increasing stress in the past three years as soaring demand has required faster ramp-up times, larger investments and greater agility to capture value in a rapidly growing sector.

Supply chain issues have dictated delivery capabilities, product strategies and pricing for every turbine supplier (Monczka, 2005)

Factors affecting supply

Innumerable factors and circumstances could affect a seller's willingness or ability to produce and sell a good. Some of the more common factors are:

Goods own price: The basic supply relationship is between the price of a good and the quantity supplied. Although there is no "Law of Supply", generally, the relationship is positive or direct meaning that an increase in price will induce and increase in the quantity supplied (Goodwin *et al.* 2009).

Price of related goods: For purposes of supply analysis related goods refer to goods from which inputs are derived to be used in the production of the primary good. for example, Spam is made from pork shoulders and ham. Both are derived from

Pigs. Therefore pigs would be considered a related good to Spam. In this case the relationship would be negative or inverse. If the price of pigs goes up the supply of Spam would decrease because the cost of production would have increased. A related good may also be a good that can be produced with the firm's existing factors of production. For example, a firm produces leather belts (Melvin *et al.*, 2002). The firm's managers learn that leather pouches for smartphones are more profitable than belts. The firm might reduce its production of belts and begin production of cell phone pouches based on this information. Finally, a change in the price of a joint product will affect supply. For example beef products and leather are joint products. If a company runs both a beef processing operation and a tannery an increase in the price of steaks would mean that more cattle are processed which would increase the supply of leather. Conditions of production: The most significant factor here is the state of technology. If there is a technological advancement in one's good's production, the supply increases. Other variables may also affect production conditions (Goodwin *et al.* 2009).

Experience in supplier and tendering criteria

A request for tender refers to a formal, structured invitation to suppliers for the supply of products or services. In the public sector, such a process may be required and determined in detail by law to ensure that such competition for the use of public money is open, fair and free from bribery and nepotism (Cartel *et al.*, 2007). . For example, a government may put a building project 'out to tender'; that is, publish an invitation for other parties to make a proposal for the building's construction, on the understanding that any competition for the relevant government contract must be conducted in response to the tender, no parties having the unfair advantage of separate, prior, closed-door negotiations for the contract. An evaluation team will go through the tenders and decide who will get the contract (Cartel *et al.*, 2007). As a consequence of the scale of the tender process the majority of RFTs are published by the government sector, but companies in the infrastructure and

utilities sectors may also publish RFTs. RFTs may be distributed to potential bidders through a tender service, allowing businesses to receive and search live tenders from a range of public and private sources. These alerts are most commonly sent daily and can be filtered down by geographical area, or by business sector. Some tendering services even divide types of business very finely in their own way, by Common Procurement Vocabulary codes. This enables a business to find tenders specific to their needs.

Preprocessing Lead Time also known as "planning time" or "paperwork": It represents the time required to release a purchase order (if you buy an item) or create a job if you manufacture an item from the time you learn of the requirement (Cartel *et al.*,2007).

Processing Lead Time: according to the study, It is the time required to procure or manufacture an item. Post processing Lead Time: this represents the time to make a purchased item available in inventory from the time you receive it (it includes quarantine, inspection, among others.)

Accordingly, suppliers are not traditionally thought to be project participants. In contrast, lean project delivery includes suppliers in the team, recognizing that they may offer not only "black box" products but could also deploy their production system to suit the project. Indeed, a project is a set of resources structured to achieve the project's objectives, and hinges on pre-established production systems from which goods and services are acquired. The project hinges on supply chains in the Lean Supply triad. A variable is the extent to which those pre-established production systems are objects of coordination and shared fortune for the contractor or owner, as opposed to existing entirely independently of the contractor or owner (Monczka, 2005).

Alternatively, products may be "assembled to order" (ATO) by putting together off -the-shelf parts to suit a customer's desired configuration prior to delivery to the customer. Configuration and assembly is done at a location

either on- or off -site, but not at the location of final installation. As a result, ATO production systems incur a lead time penalty that is to say assembly is done some time before final installation. Lean producers strive to continuously reduce such lead times so that other performance metrics may off set the costs of ATO production, for example, the lead-time penalty may be outweighed by a reduction in installation time or an increase in safety, handling efficiency, or quality (TsaoTommelein 2001).

Procurement process

According to this study, Procurement may also involve a bidding process that is to say, Tendering. A company may want to purchase a given product or service. If the cost for that product/service is over the threshold that has been established for example.: Company X policy: "any product/service desired that is over \$1,000 requires a bidding process"), depending on policy or legal requirements, Company X is required to state the product/service desired and make the contract open to the bidding process. Company X may have ten submitters that state the cost of the product/service they are willing to provide (Cartel *et al.*, 2007). Then, Company X will usually select the lowest bidder. If the lowest bidder is deemed incompetent to provide the desired product/service, Company X will then select the submitter who has the next best price, and is competent to provide the product/service. In the European Union there are strict rules on procurement processes that must be followed by public bodies, with contract value thresholds dictating what processes should be observed (Cartel *et al.*, 2007)

Procurement systems

Another common procurement issue is the timing of purchases. Just-in-time is a system of timing the purchases of consumables so as to keep inventory costs low. Just-in-time is commonly used by Japanese companies but widely adopted by many global manufacturers from the 1990s onwards. Typically a framework agreement setting terms and price is created between a supplier

and purchaser, and specific orders are then called-off as required (Cartel *et al.*, 2007).

Procurement and acquisition

The US Defense Acquisition University (DAU) defines procurement as the act of buying goods and services for the government. DAU defines acquisition as the conceptualization, initiation, design, development, test, contracting, production, deployment, Logistics Support (LS), modification, and disposal of weapons and other systems, supplies, or services (including construction) to satisfy Department of Defense needs, intended for use in or in support of military missions. Acquisition is therefore a much wider concept than procurement, covering the whole life cycle of acquired systems. Multiple acquisition models exist, one of which is provided in the following section (Monczka, 2005).

The process allows for a given system to enter the process at any of the development phases. For example, a system using unproven technology would enter at the beginning stages of the process and would proceed through a lengthy period of technology maturation, while a system based on mature and proven technologies might enter directly into engineering development or, conceivably, even production (Cartel *et al.*, 2007). The process itself includes four phases of development: Concept and Technology Development: according to the study is intended to explore alternative concepts based on assessments of operational needs, technology readiness, risk, and affordability (Cartel *et al.*, 2007). Concept and Technology Development phase begins with concept exploration.

Acquisition process

The revised acquisition process for major systems in industry and defense is shown in the next figure. The process is defined by a series of phases during which technology is defined and matured into viable concepts, which are

subsequently developed and readied for production, after which the systems produced are supported in the field (Monczka, 2005).

The increasing emphasis on supply chain management is creating focus on the supply management link in the supply chain. Cost reduction focus can become intense as companies continue to adopt e-procurement strategies to leverage competitive advantages of the Internet. Supply managers need to understand the impact of technology and gain competency in making good business case for e-procurement, research implications are profound for the industrial marketer (Cartel *et al.*, 2007). Research will involve preliminary literature as well as research based critique towards articles and journals that deal with procurement effectiveness by means of reducing costs towards electronic oriented cycles of chains and its evaluation (Monczka, 2005).

Business developments represent significant step in evolution of inter-organisational systems, impact on external supply delivery is a major area of discussion and analysis in the literature, principally examining issues of governance structure and process efficiencies. This paper, however, addresses issues relating to the impact of e-business developments on internal customer service with a focus on electronic procurement introduction – in other words it concentrates on the intra-organisational system dynamics of e-business. The procurement process is basis of internal customer-provider interfaces and thus present valid and useful domain of study in internal customer service. In contributing to the emerging e-service field the article first contends that much of the recent research into e-service has taken a primarily external customer focus (Cartel *et al.*, 2007).

Consequently, this paper focuses on the findings relating to internal e-service obtained from an extensive, primarily qualitative and exploratory, research program incorporating organisations. The study concludes that internal customer satisfaction is central to the success of e-procurement deployment and is significant determinant of the cost benefits to be gained from its adoption (Cartel *et al.*, 2007). In this economic environment, many

companies are considering or implementing broad actions to reduce spend and streamline organizational design and processes. While these types of projects are never pleasant, if done correctly, they can not only help you achieve your immediate cost reduction objectives, but create an efficient platform and new capabilities that will create a competitive advantage for you when market conditions rebound (Cartel *et al.*, 2007).

Alternative procurement procedures

There are several alternatives to tendering which are available in formal procurement. One system which has gained increasing momentum in the construction industry and among developing economies in the Selection in planning process which enables project developers and equipment purchasers to make significant changes to their requirements with relative ease. The SIP process also enables vendors and contractors to respond with greater accuracy and competitiveness as a result of the generally longer lead times they are afforded (Cartel *et al.*, 2007).

Production Control

Production control means shaping work and planning it at successive levels of detail, covering with greater accuracy increasingly shorter time periods into the future as time for action approaches, while making adjustments as needed to steer the project towards best meeting system objectives during project execution. Its objective is to maximize the likelihood of getting the work done according to project objectives. Plan reliability a key objective in lean project Delivery can be managed by means of the Last Planner TM system (Ballard 2000b).

Procurement procedure and supply delivery

Delivery is the process of transporting goods. Most goods are delivered through a transportation network. Cargo (physical goods) are primarily delivered via roads and railroads on land, shipping lanes on the sea

and airline networks in the air. Certain specialized goods may be delivered via other networks, such as pipelines for liquid goods, power grids for electrical power and computer networks such as the Internet or broadcast networks for electronic information.

The general process of delivering goods is known as distribution. The study of effective processes for delivery and disposition of goods and personnel is called logistics. Firms that specialize in delivering commercial goods from point of production or storage to point of sale are generally known as distributors, while those that specialize in the delivery of goods to the consumer are known as delivery services. Postal, courier, and relocation services also deliver goods for commercial and private interests.

Consumer goods delivery

Most consumer goods are delivered from a point of production through one or more points of storage (warehouses) to a point of sale (retail store), where the consumer buys the good and is responsible for its transportation to point of consumption. There are many variations on this model for specific types of goods and modes of sale. Products sold via catalogue or the Internet may be delivered directly from the manufacturer or warehouse to the consumer's home, or to an automated delivery booth. Small manufacturers may deliver their products directly to retail stores without warehousing. Some manufacturers maintain factory outlets which serve as both warehouse and retail store, selling products directly to consumers at wholesale prices (although many retail stores falsely advertise as factory outlets). Building, construction, landscaping and like materials are generally delivered to the consumer by a contractor as part of another service. Some highly perishable or hazardous goods, such as radioisotopes used in medical imaging, are delivered directly from manufacturer to consumer. Home delivery is often available for fast food and other convenience products, e.g. pizza delivery. Sometimes home delivery of supermarket goods is possible. A milk float is a

small battery electric vehicle (BEV), specifically designed for the delivery of fresh milk.

Delivery vehicles

The consumer demand for Supermarkets to deliver to their door created the need for a mixed temperature controlled vehicle on 3.5T chassis. These vehicle bodies were initially built with the traditional GRP sandwich panels but as more damage resistant lightweight materials with better insulation properties have become available companies have been developing Advanced Home Delivery Vehicles. The 2012 Commercial Vehicle Show in the UK saw the new JDC PolyBilt design, one of the latest of these "Plastic" bodies that can also be recycled at the end of its service life unlike the traditional GRP which ends up as landfill.

Vehicles are often specialized to deliver different types of goods. On land, semi-trailers are outfitted with various trailers such as box trailers, flatbeds, car carriers, tanks and other specialized trailers, while railroad trains include similarly specialized cars. Armored cars, dump trucks and concrete mixers are examples of vehicles specialized for delivery of specific types of goods. On the sea, merchant ships come in various forms, such as cargo ships, oil tankers and fishing boats. Freight aircraft are used to deliver cargo. Often, passenger vehicles are used for delivery of goods. These include buses, vans, pick-ups, cars for example., for mail or pizza delivery, motorcycles and bicycles for example., for newspaper delivery. A significant amount of freight is carried in the cargo holds of passenger ships and aircraft. Everyday travelers, known as a casual courier, can also be used to deliver goods.

Periodic deliveries

Some products are delivered to consumers on a periodic schedule. Historically, home delivery of many goods was much more common in urban centres of the developed world. At the beginning of the 20th century, perishable farm items such as milk, eggs and ice, were delivered weekly or even daily to customers by local farms. Milkmen delivered milk and other farm

produce. With the advent of home refrigeration and better distribution methods, these products are today largely delivered through the same retail distribution systems as other food products. icemen delivered ice for iceboxes until the popularization of home refrigerator rendered them obsolete in most places. Similarly, laundry was once picked up and washed at a commercial laundry before being delivered to middle-class homes until the appearance of the washing machine and dryer (the lower classes washed their own and the upper classes had live-in servants). Likewise deliveries of coal and wood for home heating were more common until they were replaced in many areas by natural gas, oil, or electric heating. Some products, most notably home heating oil, are still delivered periodically.

Theoretical Perspectives

This study based on the Theory of constraints cost accounting Eliyahu M. Goldratt (2008) developed the Theory of Constraints in part to address the cost-accounting problems in what he calls the "cost world." He offers a substitute, called throughput accounting, that uses throughput in place of output and considers labor as a fixed rather than as a variable cost. He defines inventory simply as everything the organization owns that it plans to sell, including buildings, machinery, and many other things.

Related Studies

According to Hengel (1995) cited by Jossop and Jones (Pg 263-8) who carried out research on purchasing ethics, among 91 British buyers, using an interview schedule, found out that applying a code has its advantages, but the effect of the code depends on the extent of commitment to the code. His survey revealed that, 74% of the buyers regard the code as the basis for their ethics in the execution of their duties. Hengel also reveals that codes of ethics are of higher importance to older people than young people which was supported by (Chandan 2000).

According to Andrew Campanella (2010), good procedures can be a great method for training and communication. Standard procedures play a key role in the management of the purchasing area and other departments that procure or purchase supplies. Procedures help to create consistency, reduce costs, and standardize inventory and aid in communication.

Guidelines: Standard procedures also provide instructions on how to perform a job. Standard procedures can be written to contain guidelines for purchasing supplies. What can be purchased, how much, who is authorized, which vendors to use, and how to go about making the purchases are some of the guidelines that can be communicated through the procedures (Monczka, 2005)

Costs: Significant cost savings can be realized by implementing standard procedures for purchasing (Cartel *et al.*, 2007). Managing department costs can be aided by using purchasing procedures. With multiple people and departments needing supplies, the procedures can communicate which items can be purchased and where they can be purchased from. This allows the company to negotiate quantity discounts with vendors (Kenneth Lyons, 2000)

Almost all purchasing decisions include factors such as delivery and handling, marginal benefit, and price fluctuations. Procurement generally involves making buying decisions under conditions of scarcity. If good data is available, it is good practice to make use of economic analysis methods such as cost-benefit analysis or cost-utility analysis (Kenneth Lyons, 2000)

Based on the consumption purposes of the acquired goods and services, procurement activities are often split into two distinct categories.

Direct procurement occurs in manufacturing settings only. It encompasses all items that are part of finished products, such as raw material, components and parts (Cartel *et al.*, 2007). Direct procurement, which is the focus in supply chain management, directly affects the production process of

manufacturing firms. In contrast, indirect procurement activities concern “operating resources” that a company purchases to enable its operations. It comprises a wide variety of goods and services, from standardized low value items like office supplies and machine lubricants to complex and costly products and services like heavy equipment and consulting services (Monczka, 2005)

Procurement is the acquisition of appropriate goods and/or services at the best possible total cost of ownership to meet the needs of the purchaser in terms of quality and quantity, time, and location. Corporations and public bodies often define processes intended to promote fair and open competition for their business while minimizing exposure to fraud and collusion (Kenneth Lyons, 2000)

Supply delivery merely important competitive advantage when stock is not held in advance. Many organizations, including many not-for-profit and service organizations where the customer is directly involved in the process, are essentially make-to-order businesses. You can’t store the finished product ahead of time; thus lead time is of critical importance. Many manufacturing and process organizations are also make-to-order (Tumutegyeize, 2004)

Principally, public entities have been using to date, Procurement contracts to procure goods/or services in order to fulfill their requirements. Procurement procedure is also referred to as the acquisition of goods and/or services at the best possible overall cost in accordance to ownership in the exact quantity and quality at the precise time in the exact place and from the appropriate source for the direct benefit or use of corporations, or individuals, generally via a contract. Simple procurement may involve nothing more than repeat purchasing (Cartel *et al.*,2007). Complex procurement could involve finding long-term partners or even suppliers that might fundamentally commit one organization to another (Republic of Uganda, Kalanguka Task Force 1999)

Significant technological changes, international trade and global competition have forced governments and public institutions to extend policy interests beyond cost minimization, and to pursue new challenges including innovation, competition, transparency and reforms (Cartel *et al.*, 2007). Policy makers have become aware of the role of UN procurement for many other socio-economic purposes (Cartel *et al.*, 2007). The relationship between partners is unlike the traditional rival relationship between buyer and seller, where the buyer puts one supplier against another frequently during the year, focusing entirely on unit cost (Cartel *et al.*, 2007). Under these conditions exists a mutual distrust between parties that is counterproductive to both. For the buying company, there generally exists an unleveraged multiple supply base that results in a competitive cost disadvantage (Scotti 2005)

Efficient and transparent management

Different procurement and supply management activities and responsibilities (product selection, forecasting and product specification, prequalification of suppliers and adjudication of tenders) should be divided among different offices, committees and individuals, each with the appropriate expertise and resources for the specific function, avoiding at all levels any possible conflicts of interest. (Monczka, 2005)

Procurement and supply management activities should be planned properly and performance should be monitored regularly (Kenneth Lyons, 2000). Procurement procedures should be transparent, follow formal written procedures throughout the process and use explicit predefined criteria to award contracts (CarterHugo *et al.*, 2002). Annual external audits to verify procurement office accounting records are required to ensure transparency and compliance with procurement policies (Monczka, 2005)

Competitive Procurement Methods, lowest possible price; procurement should be based on competitive and transparent procurement methods in order to achieve the lowest price possible for quality-assured products, except

in the case of small or emergency orders. In addition procurement should be effected in the largest possible quantities reasonable under the requirements of the program in order to achieve economies of scale (Monczka, 2005)

Monitoring of Procurement Performance, at this stage, the principal recipients or end users are charged with the responsibilities of monitoring the performance of in relations to the quality of the goods and services they supply/deliver. The principal recipient is required to submit procurement information for key health products to the Global Fund electronically for publication over the internet through the Price and quality reporting mechanism. (Monczka, 2005)

Price and Quality Reporting: The Price and Quality Reporting system is designed to keep track of procurement and quality information for key health products procured with Global Fund financing. The system provides Principal Recipients, the Global Fund and other interested parties with the opportunity to compare prices and conditions achieved across grants, countries and regions (CarterHugo *et al* , 2002)

Delivery Lead Time

In order to save costs on an independent laboratory analysis of the finished product, supplement manufacturers may ask their client to depend solely on their production records to demonstrate that a particular production run was properly prepared (Carter Hugo *et al* , 2002). Their records combined with analytical testing of the incoming raw materials, may suffice to meet the needs of their clients. But trends are changing. Quality Control has become extremely important. (Weele, 2005)

If there are no quality control measures established and a consumer survey reveals that the label potency claims do not match actual potency of the product, consumer confidence is lost (Cartel *et al*., 2007). To avoid this situation, it is important for clients to establish quality control methods early

and request for analytical reports from third party labs that prove that their products are meeting label claims before they accept shipment from the supplement manufacturer (Nkinga N. 2003)

Non-Compliance to Good Manufacturing Practices (GMP) Standards: Numerous companies each year have products recalled due to a lack of GMP protocols in their facility. Poor-quality products are a problem. Consequently, people will not continue to buy ineffective products. The health supplement industry has begun to call for Good Manufacturing Practices (GMPs) on a voluntary and self-enforced basis. Make sure your supplement manufacturer is GMP compliant and adhering to its policies. (Kenneth Lysons, 2000)

Inexperienced Research and Development Department: The research and development department team should be prepared to work closely with customers to create new formulations or help to expand existing product lines. They should be experienced in product development, blending, packaging and agglomeration (Cartel *et al.*, 2007). It is important to work with a manufacturer that is familiar with the different materials and how they might react with one another so that product integrity can be preserved. This is especially important as nutritional supplements consist of more complex formulas with multiple ingredients (Weele. J, 2005).

Substitution of Cheaper Compounds; Stringent manufacturing practices are useless if the nutrients cannot be easily absorbed by the body. Some supplement manufacturers may substitute cheaper compounds (Monczka, 2005). A client should make sure that more absorbable compounds are being used rather than the less absorbable ones (Nkinga N. 2003)

Inadequate Facility: An inadequately equipped facility could pose a challenge. The supplement manufacturer is often unable to do the type of work necessary, because they do not have the right type of equipment. Maintaining product form of a whole food ingredient requires specialized

processing equipment and experience to accomplish proper mixing, pasteurization, and maintain product appearance (CarterHugo *et al* , 2002). It is necessary to have full lab services on premises. Clients have different needs for example, speed of turnover and small batch capability. Many manufacturers are not geared for this (Tumutegyerize, 2004)

Communication, being clear on goals and expectations right from the initial stage is critical to avoid problems. Quality needs to be built in from the initial stages. If the client is geared for the cost of quality, it can be factored into the margin as well. (Monczka, 2005). The customer must be convinced the contract manufacturer will produce the final product to the same specifications as the client's own production processes. The supplement manufacturer should be able to provide educational materials to its clients so that they will understand the issues facing the operation. Confidentiality Agreements will allow for free exchange of information and ideas to develop the optimum product and maximize sales for clients. (CarterHugo *et al*, 2002)

Trust, Exercising caution against dishonest business practices needs much wisdom and discernment. Trust has become a priceless commodity today. Clients need to have faith in the manufacturing of their products to ensure continued success. Supplement manufacturers should be open to clients visiting manufacturing sites where their products are made (Cartel *et al*, 2007). Clients should learn as much about the process as they can and inspire manufacturers to review manufacturing techniques and innovations. Trust means that a supplement manufacturer will keep confidentiality against the client's competitors, safe-keeping of formulas, produce a well-made product that is also quality consistent, and keep to delivery schedules with short lead times. (Monczka, 2005)

Procurement life cycle and modern businesses

Information Gathering: If the potential customer does not already have an established relationship with sales/marketing functions of suppliers of

needed products and services (product/service), it is necessary to search for suppliers who can satisfy the requirements. (CarterHugo *et al*, 2002)

Supplier contact: When one or more suitable suppliers have been identified, requests for quotation, requests for proposals, requests for information or requests for tender or Invitation to Bid may be advertised, or direct contact may be made with the suppliers. (Tumutegyerize, 2004)

Background Review, references for product/service quality are consulted, and any requirements for follow-up services including installation, maintenance, and warranty are investigated. Samples of the product/service being considered may be examined, or trials may be undertaken. (Weele. J, 2005). Negotiation: Negotiations are undertaken, price availability, and customization possibilities are established. Delivery schedules are negotiated, and a contract to acquire the product/service is completed. (CarterHugo *et al*, 2002)

Fulfillment, supplier preparation, expediting, shipment, delivery, and payment for the product/service are completed based on contract terms. Installation and training may also be included. Consumption, Maintenance, and Disposal: During this phase, the company evaluates the performance of the product/service and any accompanying service support as they are consumed (Monczka, 2005)

Renewal: When the product/service has been consumed and/or disposed of, the contract expires, or the product or service is to be re-ordered, company experience with the product/service is reviewed. If the product/service is to be re-ordered, the company determines whether to consider other suppliers or to continue with the same supplier (CarterHugo *et al*, 2002)

Sound Procurement

So you have managed to get your business case through the board, and you are ready to begin looking for a suitable off-the-shelf software product (Cartel *et al.*, 2007). If your organization already has well defined internal procurement procedures and guidelines you will already have a roadmap of the necessary steps to ensure you make a considered, fair and effective decision. If you work for a small organization, where such procedures are not often well defined then read on. Software selection and procurement can be a tricky process. You need to be clear on the needs of your organization and on the best way to achieve them. A crystal ball to enable future-proofing would also help, but until such devices are available, you need to ensure you use a selection process which will enable you to make the best decision with the time and resources available to you (Weele. J, 2005)

It is important that you have the collective backing of business representatives who are able to make effective and considered decisions on organizational priorities and it's important that you have a process which enables you to consider and compare products in a consistent way (Cartel *et al.*, 2007). All the activities of the software selection process then need to be documented to provide an ongoing record of the decisions made and the underlying reasoning. Here is a simple guide, consisting of seven steps which should help you to make a considered and robust decision that will result in the selection of the best possible software product for your organization (CarterHugo *et al.*, 2002).

Set up a Product Selection Committee: Membership of the Product Selection Committee (PSC) should ensure representation from every stakeholder. The PSC firstly will ensure that all requirements are considered and secondly to ensure that the process is unbiased and considered fair. If any stakeholder is reluctant to join the group, ensure you outline the implications of them not being involved. That is, they will not have a say in

the product selection process. This could result in a purchase which does not meet their needs, and ultimately could impact their area of the business (Tumutegyereize, 2004)

Market survey, it is important that you are aware of the availability of the type of software product you intend to purchase. The industry is plagued with different meanings for the same term. If you have ever attempted to purchase a 'workflow' system you will be aware of the many varying interpretations of the word. The best way to gain market knowledge is to get out and about and see what is available. Speak to contacts in other organizations, go to software conferences/exhibitions, and search the internet, read industry journals. The right suppliers are unlikely to come to you by chance. So make sure you have the best chance possible to meet potential suppliers. (Monczka, 2005)

Tendering Process: Formal assessment of the market and provide a copy of the requirements specification to all potential suppliers (CarterHugo *et al*, 2002). Be very clear on how you want them to respond. You should try to evaluate their response on a quantifiable scale, thus design your invitation around this (CarterHugo *et al*, 2002)

Make sure you include factors in your scoring documents which highlight the softer characteristics of the suppliers in terms of their size, the number of employees, and their annual turnover. These factors are important when you come to consider degrees of risk. A supplier may have the best product you could ever imagine, but if it only has four employees and has only been trading for six months the risk in terms of staff turnover and organizational stability is greater than that for a larger, more established organization (Weele. J, 2005)

It will be clear from the supplier responses which ones truly aimed to understand and meet your needs, and which provided a standard response

document. It is a good sign if an organization makes contact to verify their understanding of your tender. It suggests they are thorough and keen to engage (CarterHugo *et al*, 2002)

Evaluation of your suppliers should include a score sheet of functionality in response to your requirements documents; an assessment of the supplier and details of pricing. Beware of supplier responses which include a high degree of additional enhancements necessary to make to their product meet your requirements (Tumutegyerize, 2004)

The primary reason for using evaluation criteria is to identify the supplier to be awarded a contract in a fair and objective manner. The Procurement Manual states that the counter offer or revision of scope of the solicitation should be communicated to all technically suitable vendors (Cartel *et al*, 2007). Evaluation criteria shall be documented in writing prior to the release of the solicitation documents (Cartel *et al*, 2007). Any change in the scope given in the solicitation documents should be communicated to all the vendors who responded, to give them an equal opportunity (UN Procurement Manual)

Remember that (usually) the reason you have opted to go for an off-the-shelf software product is because you want to benefit from an established product and reduce the risk of bespoke development. All these factors should allow you to come up with a shortlist of potential suppliers which should be formally agreed with the PSC. Ensure there is open access to the original responses from the suppliers to ensure transparency in the decision making process (Monczka, 2005)

Product demonstration: As the adage goes, "seeing is believing". Depending on the scale of the purchase, you are likely to want to see a demonstration of the product. All PSC members should be present and have defined roles when reviewing the various offerings (Cartel *et al*, 2007). These

should be based on specialism and expertise, for example some could focus on the details of the supplier and prepare for questions which arose from the tender response. Those of a technical background could focus on the system architecture and the implementation considerations. Ensure the PSC works effectively as a unit, using its skills and knowledge effectively to evaluate all aspects of a supplier's offering, as well as the supplier itself (Nkinga N. 2003)

It is important that each supplier is given the opportunity to demonstrate their product in a fair and consistent manner. I have seen many product demonstrations where a supplier seems to be able to win the audience over by demonstrating functionality which is not in the requirements specification (CarterHugo *et al* , 2002). It is important to ensure that your short-listed suppliers keep to the defined system features and that demonstration time is used effectively. A good way to approach this is to set them a task. Highlight areas of your requirements which you would like to see in the demonstration and provide a set of fictitious scenarios (Lysons, 2000)

It allows you to engage with the suppliers on a shared problem and will also allow you to get a first impression of what they would be like to work with. An established provider will be able to give examples of how such processes tend to work in the wider world outside of your organization, highlighting experience they have gained from existing customers. Ensure you consider the time put aside for the demonstration. For example if you allowed for a 90 minute presentation you may split it as follows: - 15 minutes for introduction to the supplier organization, 30 minutes general demo of the product, 30 minutes on example scenario(s) and 15 minutes for questions and answers (Weele. J, 2005)

Make the suppliers aware of the timings in advance, this will allow them to prepare effectively. If they begin to overrun, make them aware and try to bring them back on track. There is never unlimited time to make a decision. Suppliers have to ensure they are able to demonstrate their system to you in

an effective way in the time given. If you are clear and concise on how you want the demo to operate you will find it easier to compare the products in your assessment (Tumutegereize, 2004)

Never underestimate the potency of a well designed visual interface. Non-technical audiences often assume that visual elegance implies a well designed product under the bonnet. This is not necessarily the case. The IT specialists in the PSC should be aware of this and advise accordingly. Your balanced evaluation of the product should obviously include consideration of any user interfaces, which will be backed-up with checks and measures on the underlying technology (Weele. J, 2005)

Product Selection and Decision Time: Having seen all the products short-listed and assuming the PSC feel they have seen enough suitable suppliers to make a reasoned selection, it is time to decide which one to go for. Insist on evidence for the decision. Your scoring document(s) from step four form the bases of further consideration during the product demonstration. Now you have seen the product and had a chance ask questions, revisit the scoring document and make (versioned) amendments as necessary. The PSC should then reconsider the documents and confirm the outcome presented. This is likely to lead to lively discussion, where committee members will share their impressions of a product and often those presenting them. Beware of group influence. If you are in a position to chair the PSC, identify the influential members of the group and try to ensure they are not always the first to give their opinion (Lysons, 2000)

Building confidence: ensure all is as it seems. You would not employ a staff member without seeking references, would you? It is amazing how many purchases are made without talking to the supplier's existing customers first. The process of seeking references will vary according to the scale of your purchase (CarterHugo *et al* , 2002). Ask your chosen supplier to provide a list of at least 25 per cent of their customers. You may need to negotiate on this.

Be aware that not all existing customers will agree to be reference sites, for various reasons (CarterHugo *et al*, 2002)

You should insist on being provided with a set of reference sites for you to select from, rather than allowing the chosen supplier to select them and set them up for you. This ensures you are able to select the most appropriate customers and elements any element of bias. The following-up of the reference can take any number of forms, at the simplest level it could be a telephone call, at the most thorough a visit to their site. Regardless of the method, ensure you go prepared with both closed and open questions derived from your scoring documents (Monczka, 2005)

You should now have a complete set of records highlighting the requirements, the company profiles, the response documents, scoring documents and references (Cartel *et al*, 2007). You are ready to present your findings to your internal purchasing authority in the knowledge that you have considered the market, consulted effectively with the business, and verified the performance of the provider (CarterHugo *et al*, 2002)

The procurement process is associated with the obligations of timeliness, effectiveness, efficiency, competition, transparency, equitable distribution, and development. At the macro-level, public procurement creates a dynamic a chain reaction which can benefit the economic life of a country and support the development of the private sector. Thus historically a direct or indirect link has always been made between the performance of the procurement function and the collective fulfillment of social and economic objectives (Sustainable Procurement in the UN System, UNEP Journal, September 2004)

Identifying a need is the first step in the procurement process. If the business has an automated system, typically a purchase requisition (PR) will be sent to the buyer indicating what product or service is needed. For

businesses without automated systems, a handwritten PR is often used, which requires the person or department that needs the product or service to submit a purchase requisition form to the buyer for action (Monczka, 2005)

If the product or service has previously been purchased, the buyer will enter a purchase order in the ERP system or submit payment to the supplier based on the previously agreed to terms and conditions. If the product or service has not been procured before, the buyer must proceed with a request for quotation (RFQ) (Lysons, 2000)

Selecting a supplier typically involves sending RFQs to multiple suppliers and comparing the bids to determine which supplier can best meet the needs of the business (Cartel *et al.*, 2007). The buyer will request a specific quantity and delivery date based on the requirements outlined on the purchase requisition. Depending upon the type of product or service required, there may also be the need for technical qualifications or special licensing (Tumutegereize, 2004).

Determining the price paid usually includes comparing bids then negotiating the best price: The buyer should ensure all bids are an accurate reflection of the work to be performed or service provided and include all applicable taxes and shipping charges. This way, the total landed cost is known before the purchase order is placed (CarterHugo *et al.*, 2002)

It is also necessary to understand the lead time and expected quantity to be delivered. Based on the actual need date, any accepted quote should meet the required date. If the supplier cannot meet the date needed by the business, expedite premiums may be incurred. The expected quantity should also be supported by the quote received. The buyer must make sure the quantity to be shipped is not less than requested because the shortage may result in loss revenue (Monczka, 2005). The buyer must also make sure the quantity to be shipped is not more than needed because the excess may result in liability for the business if the product is never used (Cartel *et*

al.,2007). Ultimately, the buyer is responsible for ensuring the procurement process is executed to meet the needs of the business while maintaining the profits (Monczka, 2005)

Procurement Evaluation Procedures

According to the European Union procurement rules all procurement must be open to competition. Competition allows an organization the best chance to acquire goods or services whilst achieving value for the money, which includes whole life costing. Increasingly sustainability issues should be considered but cost must be taken into account. All procurement should be fair, open and transparent. This is based on best procurement practice that advises no supplier should be favored or put at a disadvantage. To this end a well defined procurement procedure for evaluation is an essential tool in the purchasers' toolkit (Lysons, 2000)

Producing the Requirement; It may seem early in the process to consider the requirement as essential in evaluation procedure; however, without a sound requirement being defined there can be no successful evaluation carried out. The basic premise being that if you have nothing solid to measure your evaluation against then you have no evaluation. The first procedure is therefore to ensure you have a clear and unambiguous description of the requirement (Monczka, 2005). The requirement needs to be subject to the relevant sign off before it is issued to suppliers. Without this simple precaution returning tenders may not specify the end user requirement (Tumutegereize, 2004)

Supplier Selection: The next procedure in the evaluation process is to ensure the mechanics are in place to ensure that supplier evaluation begins very early in the procurement process. From the outset the supplier selection criteria should be clearly defined (Weele, 2005). Supplier selection can begin with expressions of interest from suppliers, followed by assessing the supplier's response to information requests or pre-qualification questionnaires.

To further explore a supplier's capabilities they should then be invited to negotiate or present the options. Unsuccessful suppliers should be noted and allowed feedback opportunities. Supplier evaluation should be an ongoing procedure (Weele, J, 2005)

Proposal Evaluation, once the selection of suppliers that you want to bid has been established, the evaluation of their proposals should be sought as the next step of the evaluation procedure. As part of the planning process a defined evaluation criteria should have been defined. You must continue to follow and score against this pre-defined model. The model should look at quality and how well it solves the problem you have set in the requirement. (Monczka, 2005)

Bid Evaluation, it may seem that bid and proposal evaluation are one and the same, they are not. The proposal looks at the solution to the problem you have posed, the bid requires the procurement professional to look at the legal and financial elements of the supplier returns. Financial considerations and quality aspects should always be evaluated as separate entities. The bid evaluation procedure looks at the financial stability of an organization and assesses the risks posed by engaging with any supplier. After completing the two evaluations (quality and financial) a judgment based on overall value can be aggregated. (Lysons, 2000)

One of the final procedures that must be completed is award, both the successful and unsuccessful bidders need to be informed in writing with the offer of debrief to unsuccessful bidders. The rationale behind offering debrief to unsuccessful bidders is to help them improve their competitive performance. It can also help the buying organization recognize ways to improve procedures. Best practices also recognize that the award procedure should include a standstill period between making a decision and an official

contract award. This is so that any challenges from suppliers who have been unsuccessful can have their queries answered (Weele. J, 2005)

General Procurement Procedures

One of the most common procedures among businesses is procurement. All businesses must purchase goods or services and work with vendors. Manufacturers need raw goods to create products, and retailers need product on the shelf to sell. The ability for businesses to reduce and cut costs is directly related to the procurement function. The procedures surrounding the process must be constantly updated. (Bradley James Bryant ,2004)

The standard procurement cycle comprises the following five elements: identifying the need, preparing the specification, finding the supplier, awarding the contract, and measuring and monitoring performance (Cartel *et al.*,2007). Following and understanding this cycle is fundamental to taking control of relationships with suppliers and of the market place. This structure is particularly important when procuring e-resources, where the business models are still fluid, (Bournemouth University Research Online, 2007).

The first step is to determine precisely what is required, and on what basis it should be procured, leased, hired, shared et al. Once the need has been identified, it has to be expressed in a specification. This specification is fundamental to any procurement: it informs potential suppliers of what is required, how, when, and to what standards. If the specification is wrong, there is no chance of satisfying adequately the procurement needs. It should contain enough information and detail to ensure that both suppliers and purchasers are addressing the same requirement and that, suppliers can cost fully the products or services required. Over specifying stifles creativity and the development of partnership, and hence decreases the potential benefits of any procurement, (Ibid, 2007).

Secondly, one will of course want to evaluate the price quoted, bearing in mind the different cost models and the need to evaluate the cost over the whole life of the contract. Thirdly, one will evaluate quality. This can be the most difficult area: quality is not easy to quantify, involving judgment rather than facts such as cost; moreover, one may well be in the position of judging the likely performance of a supplier with which one has had no dealings. There are some relatively concrete indicators, particularly accreditation under quality schemes such as ISO 9000 or Investors in People and membership of professional organizations, (Ibid, 2007).

Finally, one may wish to evaluate the ability of the supplier to meet the specification. This applies particularly in procurements that are complex, or seek to develop new services. Apart from the pass/fail requirement of financial health, the aforementioned elements of cost, quality, and ability to meet the specification will differ in importance, depending on the situation of the purchaser and the type of procurement; one will therefore wish to recognize these differences by weighting the three elements accordingly, (Ibid, 2007).

After the above procedure is adhered to, the deal is concluded. The obligations of the supplier and buyer, based on the specification, are written into a contract. The contract will normally be supplemented by service-level agreements and performance measures (World Bank 2000). The procurement cycle is far from over after the contract has been awarded. Contract management is the process of ensuring that specification, service-level agreements, and performance measures are met over the period of the contract, is essential if suppliers are to be managed satisfactorily. This is generally achieved through quarterly contract review meetings with individual suppliers, who are expected to provide management information on the performance measures, drawn from the specification and detailed in the agreement, (Ibid, 2007).

There are different procurement methods that determine the complexity of the above named procedure, they are: Open Tendering method: This is the procedure involves public contracts being openly advertised in print and electronic media to enable all interested service providers to submit a proposal or bid; Restricted Tendering Method: Only those service providers invited by the entity may submit a proposal and this usually involves a two staged bidding process and is restricted to the qualified vendors who are shortlisted by the Procurement Entity; Requests for Proposals (RFP): This is when a procuring entity wishes to engage intellectual services(Cartel *et al.*,2007)

Request for Quotation: This method is used when buying readily available goods or services. Standard practice is that quotations are invited from at least three firms and the lowest priced firm is selected to supply the requirement; Direct Procurement: This method does not allow for any competition (Cartel *et al.*, 2007).

Implement a Quality Management System: If procurement needs are decentralized, procedures are a good way to centralize functions. This helps to maximize efficiencies. Consider implementing centralized procurement software or a quality management system (QMS) with built-in procurement procedures like International Standards Organization (ISO) or LEAN. Procurement plays a large part in better quality and leaner processes. As such, it is a central focus for both QMS programs.

Signature Authority and Accountability: One of the most important control procedures within procurement is signature authority. Signature authority refers to the requirement of a signature in order to release a purchase order. Accountability over spending thresholds is critical to maintaining quality and should therefore be highlighted within general procurement procedures. Review the confirmation procedure in place to know a vendor is processing an order. Put a process in place to trigger an event

should the order never be received. Also put in place a procedure for verifying lead times (time it takes from placing the order to delivery). This can affect your ability to provide quality service to your own customers. (Monczka, 2005)

Purchasing and Sourcing

The New Year's arrival made me ponder over how purchasing in 2008 differs from purchasing in 1998. Here are the top 10 purchasing changes in those 10 years. The Supply delivery was recognized. In the last decade, companies more closely analyzed the way material flows into, through, and out of the organization. This "supply chain" focus has those who once just placed orders now responsible for inventory, warehousing, outbound logistics, and distribution (Weele. J, 2005)

Social Responsibility Became A Top Priority. Whether for philanthropy or to avoid media scandals, management counts on Purchasing more than ever to buy from diverse suppliers, make environmentally-conscious decisions, and do business ethically and Purchasing Grabbed More Spend. When purchasing departments deliver results, management seeks more spend that Purchasing can positively impact. Once sourced by other departments, categories like fleet management, benefits, and travel services are now sourced by Purchasing. (CarterHugo *et al* , 2002)

Procurement Qualification and In-service Training

Millerson and Lysons (2000 Pg19) defined a profession as a type of higher grade non-manual occupation with both subjectivity and objectivity recognized occupational status possessing a well defined area of study or concern and providing definite service after advanced training and education" Millerson shows that procurement is a non-manual occupation, requiring procurement qualifications for effective delivery of services, in terms of quality, costs and time (Monczka, 2005)

Mugerwa (2002) citing Thomas *et al* (1998) in their study of the Association of continuing professional Education (CPE) cite a relationship between low levels of CPE and substandard performance by Certified Public Accountants. The study shows that having qualifications and relevant training may improve exposure and knowledge hence improved performance. This therefore provides a strong need for training. (CarterHugo *et al* , 2002)

According to PPDA Assessment Report (2004) on training needs, carried out 99 PDE's, the findings revealed that 23% of PDE's had undergone training organized by PPDA (Cartel *et al*.,2007). The common areas cited for training included, roles of all key actors in the procurement process, Procurement and Disposal planning, specification writing, bid evaluation, contract management and disposal of public assets. The implication is that, inadequate training results to poor performance of the procurement system and when extended to this study, it affects the implementation of PPDA guidelines and or reforms which in turn results in failure of achieving better quality, costs and lead time (Tumutegyeize, 2004).

Having procurement qualification and relevant training, procurement staffs are expected to exercise professionalism defined by the status, methods or standards within a carrier area as a means to help control corruption. Being a professional, doesn't eliminate the possibility of individual members being corrupt, instead it helps control improper behavior by allowing actions to be judged against standards accepted by the profession (Wittig 1998). Wittig observed that if Adam Smith's "invisible hand" causes the free market to work through optimizing self interests, Governments need to glove that hand with integrity rules to keep it from sullyng public procurement (CarterHugo *et al* , 2002).

CHAPTER THREE

METHODOLOGY

Research Design

The study employed descriptive design, descriptive in a sense that it described the demographic characteristics of the respondents in terms gender, age, educational qualification post/position in the organization and length of experience in procurement and supply activities. It was Descriptive correlations in the sense that it established a relationship between procurement procedures and supply delivery.

Research Population

The target population under the study comprises of 350 with a 150 sample in sections of; communication information technology, engineering supply, finance, general services budget, contracts management and procurement, medical, transport Air operations. These employees are selected base on their role in the general operations/activities and big enough to provide the required samples.

Sample Size

While there are several ways of determining sample size, the researcher used, The Slovene's formula is used to determine the minimum sample size of 150 respondents, as indicated below:

$$n = N / 1+N (e^2) .$$

Where: **n** = the required sample size

N = Known population size

e² = Margin of error at 0.05 level of significance.

$$n=350$$

$$n = \frac{350}{1+350 (0.05^2)} \quad n = \frac{350}{1+350 (0.002)}$$

$$n = \frac{350}{1+0.325}$$

= 150 so a total of 150 respondents were used for the research

Table 1
Population and Sample size distribution

Distributions	Population	Sample size
Communication Information Technology	55	22
Engineering Supply	55	30
Finance	45	19
General Services Budget	50	22
Contracts Management And Procurement	45	22
Medical	45	15
Transport Air Operations	55	20
Total	350	150

Source: Primary Data manual 2011/2012

Sampling Procedure

Choice of respondents was based on two techniques: stratified sampling and simple random sampling. Stratified sampling ensured that all categories of procurement section were represented; while simple random sampling gave each worker a chance of representation.

Care was taken to ensure that all work shifts; the day, evening and night were represented in the study. Departments were chosen using the simple random sampling technique to ensure objectivity in the study.

The researcher used purposive sampling techniques to select the respondents using these inclusion criteria: (1) either male or female; (2) with one year or more work experience in supply and procurement activities; (3) full time company staff.

Research Instrument

Three measuring tools used in this study were

1. face sheet, questionnaire to determine socio- demographic characteristics of the respondents;
2. Researcher made questionnaire to determine the level of procurement procedures is a non standardized tool (20 items) with response modes and scoring system as follows: Very High (4); High (3); Moderate (2); Low (1).

3. The questionnaire for the extent of supply delivery is non-standardized with 20 items and these scoring system: Very High (4); High (3); Moderate (2); Low (1).

Reliability of the Instrument

Composite reliability assessed inter-item consistency using Cronbach's alpha. Although the constructs developed in this study were measured primarily on previously validated measurement items and strongly grounded in the literature, they were modified to suit UNIMAD.

Table 2

A cronbach alpha of coefficients for reliability instrument

items	Cronbach's Alpha	Number of items
Supply delivery	0.811	40

Validity

To establish Content validity of the questionnaires, the researcher specified the indicators which were relevant to the concept being measured. The researcher relied on the supervisor to measure content validity. The supervisor assessed what concept the instrument was trying to measure and ascertained that the instruments adequately measured logistic contribution, and delivery.

Table 3

Validity of the data analysis

Items	Valid Items	Total Items	Validity
Procurement procedures	20	20	100%

The results in table 3 indicated that 20 items were used and valid based on the contents of the instrument. Thus $CVI = \frac{\text{the number of relevant questions}}{\text{The total number of questions}}$

Data Gathering Procedures

Before data gathering

1. An introduction letter was secured from the College of Higher Degrees and Research to conduct the study after which permission from UNIMAD authorities were sought to distribute questionnaires to their staff.

2. The researcher was oriented and briefed his research assistants on the sampling and data gathering procedures/techniques.
3. The questionnaires for actual distribution were prepared and coded accordingly.
4. The non standardized instruments were tested for validity and reliability.

During data gathering

The respondents were requested to answer the questionnaires as objectively as possible and not to leave any option unanswered.

After data gathering

The data collected were collated, organized and entered into the Statistical Package for Social Sciences (SPSS) for data processing and analysis.

Data Analysis

Data analysis involved editing, categorizing, and tabulating the collected data sets. Frequencies and percentage distribution were used to determine the profile of respondents.

Means scores were used to determine the level of procurement procedures and supply delivery. These numerical values were utilized for the interpretations of means:

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly agree	Very high
2.51-3.25	Agree	High
1.76-2.50	Disagree	Moderate
1.00-1.75	Strongly Disagree	Low

A multiple correlation coefficient to test the hypothesis on correlation (Ho #1) at 0.05 level of significance was employed using a t-test. The regression analysis R^2 (coefficient of determination) were computed to determine the influence of the dependent variable on the independent variable.

Ethical Considerations

To ensure that ethics is practiced in this study as well as utmost confidentiality for the correspondents and the data provided by them, the following were done:

- (1) coding of all questionnaires;
- (2) the respondents were requested to sign the informed consent form;
- (3) the authors mentioned in this study acknowledged within the text; and
- (4) findings were presented in a generalized manner

Limitations of the Study

The anticipated threats to validity in this study would be:

Intervening or confounding variables: some respondents although the were informed about the agency of the study they kept on shifting the date of collecting the questionnaire, son it was not easy to get them within the set time period.

The research environments are classified as ***uncontrolled settings*** where extraneous variables influenced on the data gathered such as comments from other respondents, anxiety, stress, motivation on the part of the respondents.

Testing: The use of research assistants rendered inconsistencies such as differences in conditions and time when the data was obtained from respondents although they were brief

Instrumentation: coding of the questionnaires took a lot of time due to interruption of the power.

Incomplete questionnaires; some questionnaires were not fully completed, although the research had distributed more than the required number which helped much to bridge the gap.

CHAPTER FOUR

DATA INTERPRETATION, PRESENTATION AND ANALYSIS

This chapter presents analyses and interprets findings on demographic characteristics of respondents, level of procurement procedures, extent of supply delivery and significant relationship in procurement procedures and extent of supply delivery in African Union-United Nations Hybrid Operation in Darfur.

Profile of Respondents

Respondents were asked to provide information regarding their gender, age, marital status, educational levels, and experience

Table 4

**Profile of Respondents in terms of gender, age and educational Level
(n=150)**

Category	Frequency	Percent
Gender: Male	93	62.0
Female	57	38.0
Total	150	100.0
Age: 20 - 39 years	86	57.3
40 - 59 years	56	37.3
60 years and above	8	5.3
Total	150	100.0
Marital status	80	53.3
Married		
Single	46	30.7
Divorced	12	8.0
Widowed	12	8.0
Total	150	100.0
Education level	33	22.0
Certificate		
Diploma	67	44.7
Bachelors Degree	49	32.7
PhD	1	.7
Total	150	100.0

Source : Primary data(2012)

In this study, respondents were described according to gender, age, educational qualification and number of years of experience in logistics and supplies activities. In each case, respondents were asked to declare their respective profile information in order to enable the researcher classify them accordingly. Close ended questionnaire were employed by the researcher in ascertaining information about their personal profiles and analyzed their responses using frequencies and percentage distributions as summarized in table 4 above.

The findings indicated that most respondents were male 93(62%), ranged between 20-39 years of age with 86 (57.3%), over 80 (53.3%) were married, had Diploma in education and majority 55 (36.7%) had a length of experience between 3 – 4 years.

The level of service delivery at Sections and Partners of UNAMID, Darfur was also High with an average mean of 2.94, this means that the level of service delivery was generally High.

Pertaining age 86(57.3%) respondents were in the age bracket of 20-39, 56(37.3%) were in the age bracket of 40-59 of age and 8 were 5.3. It can therefore be deduced that though all age categories were represented, the youth respondents monopolized in this study. This is true because organizations prefer employing youths who have the potential to work towards development.

Regarding the educational qualification of respondents 32.7% had bachelors, 44.7% diploma, 22.0% had certificates and 4% had masters, therefore respondents with bachelors dominated in the sample.

Level of procurement procedure to UNAMID

The independent variable in this study was procurement procedures for which the researcher wanted to determine its level in which respondents were required to indicate the level to which they rate(high or low) with each of the items by indicating the number that suits their perceptions.

Each of these questions was measured on a 4-point Likert scale. Their responses were analyzed using SPSS and summarized using means as indicated in table 5A below;

Table 5
Extent of Procurement procedure Item Analysis
(n=150)

Category	Mean	Interpretation	Rank
Request for Proposal			
You informs suppliers that an organization is looking to procure and encourages them to make their best effort.	2.98	High	1
You requires the company to specify what it proposes to purchase.	2.95	High	2
A clear standard of procurement meets quality expectations.	2.94	High	3
You follow a structured evaluation and selection procedure	2.90	High	4
You ensures that suppliers respond factually to the identified requirements	2.87	High	5
Average mean	2.93	High	
Request for Information			
You state concern related to the omission or misapplication of a product	2.86	High	1
You seek further clarification of the building owner's intended use	2.85	High	2
It is acceptable for the subcontractor to use an request for information to call attention to an inferior product that may not meet the building owner's needs.	2.83	High	3
You use your expertise to recommend the better/correct product	2.81	High	4
You schedule time period for deliverables and payments	2.70	High	5
Average mean	2.81	High	
Request for Quotation			
You compare costs from various suppliers	2.76	High	1
The Request for Quotation involves more than the price per item.	2.74	High	2
Information like payment terms, quality level per item or contract length are possible to be requested during the bidding process	2.71	High	3
The suppliers have to return the bidding by a set date and time	2.70	High	4
You hold discussions on the bids	2.69	High	5
Average mean	2.72	High	
Request for Tender			
Evaluation team go through the tenders and decide who will get the contract	2.65	High	1
Request for Tender may be distributed to potential bidders through a tender service	2.65	High	2
You ask for information about the suitability of the business and cost involved	2.64	High	3
You inquire for availability of goods and service(items)	2.63	High	4
You investigate for the experience of the supplier	2.56	High	5
Average mean	2.63	High	
Overall mean	2.77		

Source: Primary Data (2012)

Key for interpretation of means

Mean range	Response mode	Interpretation
3.26-4.00	strongly agree	Very High
2.51-3.25	Agree	High
1.76-2.50	Disagree	Moderate
1.00-1.75	Strongly disagree	Low

The results in table 5 above measure the aspect of Request for Proposal; all the five items were rated High (average mean=2.93), indicating that on average the procurement procedures was satisfactory in terms of Request for Proposal. You informs suppliers that an organization is looking to procure and encourages them to make their best effort was rated highest on procurement procedures (mean=2.98) and lowest on you ensures that suppliers respond factually to the identified requirements (mean=2.87). This means that A Request for Proposal is very important aspect in procurement procedures and the entire organisation.

The findings also reveal that, The Request for Proposal presents preliminary requirements for the commodity or service, and may dictate to varying degrees the exact structure and format of the supplier's response. Effective Request for Proposal typically reflect the strategy and short/long-term business objectives, providing detailed insight upon which suppliers will be able to offer a matching perspective

The results in table 5 above measure the aspect of Request for Information; all the five items were rated High (average mean=2.81), indicating that on average the procurement procedures was satisfactory in terms of Request for Information. You state concern related to the omission or misapplication of a product was rated highest on procurement procedures (mean=2.86) and lowest on you schedule time period for deliverables and payments (mean=2.70). This means that if the potential customer does not already have an established relationship with sales/ marketing functions of suppliers of needed products and services (P/S), it is necessary to search for suppliers who can satisfy the requirements.

The results in table 5 above measure the aspect of Request for Quotation; all the five items were rated High (average mean=2.72), indicating that on average the procurement procedures was satisfactory in terms of Request for Quotation. You compare costs from various suppliers was rated highest on procurement procedures

(mean=2.86) and lowest on you hold discussions on the bids (mean=2.69). This means that a When one or more suitable suppliers have been identified, requests for quotation, requests for proposals, requests for information or requests for tender may be advertised, or direct contact may be made with the suppliers.

Thus, references for product/service quality are consulted, and any requirements for follow-up services including installation, maintenance, and warranty are investigated. Samples of the P/S being considered may be examined, or trials undertaken.

To receive correct quotes, Request for Quotation often include the specifications of the items/services to make sure all the suppliers are bidding on the same item/service. Logically, the more detailed the specifications, the more accurate the quote will be and comparable to the other suppliers. Another reason for being detailed in sending out an RFQ is that the specifications could be used as legal binding documentation for the suppliers. The suppliers have to return the bidding by a set date and time to be considered for an award. Discussions may be held on the bids (often to clarify technical capabilities or to note errors in a proposal). The bid does not have to mean the end of the bidding. Multiple rounds can follow or even a reverse auction can follow to generate the best market price

The results in table 5 above measure the aspect of Request for Tender; all the five items were rated High (average mean=2.63), indicating that on average the procurement procedures was satisfactory in terms of Request for Tender. Evaluation team go through the tenders and decide who will get the contract was rated highest on procurement procedures (mean=2.65) and lowest on you investigate for the experience of the supplier (mean=2.56). This means that Supplier preparation, expediting, shipment, delivery, and payment for the P/S are completed, based on contract terms. Installation and training may also be included.

On the overall, it is deduced that procurement procedure in organizations are generally High with a mean of 2.77 as the overall mean index (Grand average mean) for the for aspects, which confirmed that the extent of procurement procedures of Sections and Partners of UNAMID is High where respondents agreed with it.

Extent of Supply Delivery UNAMID

The dependent variable in this study was supply delivery, for which the researcher intended to determine its effectiveness. Respondents were asked to rate the level of supply delivery in the organisation by indicating the extent to which they rate (very high or low) with each question. Their responses were analyzed using SPSS and summarized using means and indicated in table 6 for interpretation of means, the following means ranges were adopted.

Table 6
Extent of Supply Delivery Item Analysis
(n=150)

Procurement criteria	Mean	Interpretation	Rank
There is a Procurement cost attached.	2.87	High	1
We have a Supply schedule	2.85	High	2
There is a vendor service capability	2.79	High	3
Vendor training and development	2.75	High	4
There is vendor selection and management	2.73	High	5
There is a vendor-company relationship	2.73	High	6
There is quality specification	2.72	High	7
We always make –or-buy decision	2.65	High	8
Average mean	2.76	High	
Tendering criteria			
There is provision of financial record	2.77	High	1
There is calling of various suppliers	2.73	High	2
Customer relationship management is linked to continued growth in sales	2.72	High	3
I have design of package required for handling and storage	2.67	High	4
Customer service and information is vital for business success and retaining potential customers	2.65	High	5
We have Scrap value of the package	2.63	High	6
Average mean	2.70	High	
Experience in supplier			
Material handling equipment and operating costs	2.91	High	1
Storage and retrieval frequency of goods	2.80	High	2
Usual life and resale or scrap value of equipment.	2.77	High	3
Material handling equipment selection and replacement policies	2.68	High	4
Safe, smooth and speedy placing and positioning of goods to facilitate their movement and storage	2.65	High	5
Average mean	2.76	High	
Overall mean	2.74	High	

Source: Primary Data(2012)

Guide to interpretation of means (Tables)

Mean range	Response mode	Interpretation
3.26-4.00	strongly agree	Very High
2.51-3.25	Agree	High
1.76-2.50	Disagree	Moderate
1.00-1.75	Strongly disagree	low

The results in table 6 above show the three items on the dependent variables which were collected from the customers at UNAMID). All the items for the dependent variables were measured on a four likert scale (1 = low, 2=moderate, 3 = High and 4 = Very High).

Table 6 results indicate that eight items on Supply delivery were measured on reveals that procurement costs attached was High on aspect like There is a Procurement cost attached with a mean of 2.87, followed by, We have a Supply schedule with a mean value of 2.85. There is a vendor service capability with a mean of 2.79 followed by Vendor training and development with 2.75. There is vendor selection and management with 2.73. There is a vendor-company relationship with 2.73. There is quality specification with 2.72, and we always make-or-buy decision with 2.65 with average mean of 2.76 this means that procurement cost is always effective for every service delivery to be done at UNAMID.

On another aspect that is Packaging (Table 6), six items were measured and showed on average High with a mean of 2.70. Also the means ranged from (2.77-2.63), this means that Protective packaging is a support activity of transportation and inventory maintenance as well as of warehousing and materials handling because it contributes to the efficiency with which these other activities are carried out. Purchasing and product scheduling often may be considered more a concern of production than of logistics. However, they also affect the overall logistics effort, and specifically they affect the efficiency of transportation and inventory management.

About experience in supply, they were five aspects and one item ranked very High with a mean of 2.76, on average High with a mean of 2.82 and low on aspect of warehousing are always available to Materials Handling goods with a mean of 2.65. This therefore indicates Materials Handling is always high which some times affects beneficiaries inline with Safe, smooth and speedy placing and positioning of goods to facilitate their movement and storage.

On the overall, it is deduced that service delivery in organizations are generally High with a mean of 2.76 as the overall mean index (Grand average mean) for the six aspects, which confirmed that the level of service delivery Sections and Partners of UNAMID is High where stakeholders agreed with it.

Significance Relationship Between the Level of procurement procedure and Extent of Supply Delivery to African Union-United Nations Hybrid Operation (UNAMID) in Darfur

The forth objective of sought to determine relationship between the level of Procurement procedures and supply delivery of African Union-United Nations Hybrid Operation (UNAMID). On this, the researcher stated a null hypothesis that there is significant relationship between Procurement procedures and supply delivery to African Union-United Nations Hybrid Operation (UNAMID) in Sudan. To achieve this last objective and to test the null hypothesis, the researcher correlated the means of all aspects of procurement procedures and supply delivery in Sudan using Pearson linear correlation coefficient, as indicated in table 6 below:-

Table 7

Relationship between the Relationship Between the Level of procurement procedure and Extent of Supply Delivery to UNAMID in Sudan.

(Level of Significance = 0.05)

Variables Correlated	r-value	Sig.	Interpretation	Decision on Ho
Procurement Procedure Vs Procurement criterion	.386	.000	Significant correlation	Rejected
Procurement Procedure Vs Tendering criteria	.383	.000	Significant correlation	Rejected
Procurement Procedure Vs supplier experience/reputation	.570	.000	Significant correlation	Rejected
Procurement Procedure Vs Overall Extent of Supply Delivery	.744	.000	Significant correlation	Rejected

Source: primary Data 2012

The results in table 7 indicate that the relationship that exist between logistic contribution and service delivery is significantly correlated, (all sig.<0.05). This means that the more procurement procedures is given attention and available in the firm, the more the supply delivery in UNAMID and the less and inaccurate procurement procedures, the less the supply delivery.

Table 8

Regression Analysis between the supply delivery and procurement procedures

Variables Regressed	Adjusted R²	F	Sig.	Interpretation	Decision on H₀
Supply delivery Vs Procurement procedures	.755	76.967	1.636	Significant effect	Accepted

Results (Table 8) show that 75.5% ($r^2=0.766$) of the dependent variable (supply delivery) is explained by the independent variable (procurement procedures). This implies that procurement procedures contribute more to supply delivery in UNAMID.

CHAPTER FIVE

FINDINGS, SUMMARY CONCLUSION AND RECOMMENDATIONS

This final chapter presents and summarizes the findings, conclusions and recommendations of study. The study aimed to determine the relationship between the extent of procurement procedures and the level of supply delivery in African Union-United Nations Hybrid Operation (UNAMID).

SUMMARY OF FINDINGS

The following were the findings of the study.

1. Respondents' demographic characteristics in terms of gender, age, marital status, and education level in African Union-United Nations Hybrid Operation in Darfur.
 - 1.1 More than half of the study participants were **male** (62.0%)
 - 1.2 Majority of the participants (57.3%) fall under the **early adult stage of life** (20-39 old).
 - 1.3 On educational level, **Diploma holder** dominated among others (44.7%).
 - 1.4 Regarding marital status, most of the respondents were **married** (53.3%)
2. The extent of procurement procedures as practiced in the mission ranged from **very high to low**. Evidently there were some areas of procurement procedures in which the respondents were fully satisfied such as;
 - 2.1 It brings about an interface of logistics with marketing that determines Procurement or purchasing of supplies requires a certain body of knowledge that must be shared with all employees approved to make purchases.
 - 2.2 Mechanisms should be put in place to ensure reliable financing for procurement of products required by end-users.
 - 2.3 Procurement procedures should be transparency, follow formal written procedures throughout the process and use explicit predefined criteria to award contract.

- 2.4 Different procurement activities should be divided among different offices, committees and individuals.

On the overall, it is deduced that procurement procedure in organizations are generally High with a mean of 2.77 as the overall mean index (Grand average mean) for the for aspects, which confirmed that the extent of procurement procedures of Sections and Partners of UNAMID is High where respondents agreed with it.

3. Majority of the respondents response on the level of supply delivery were good with these options most frequently rated high:

- 3.1 There is a Procurement cost attached
- 3.2 We have a Supply schedule
- 3.3 There is provision of financial record.
- 3.4 Customer relationship management is linked to continued growth in sales
- 3.5 Material handling equipment and operating costs
- 3.6 Storage and retrieval frequency of goods
- 3.7 You have a business plan to guide your investments
- 3.8 Your business is protected against creditors.
- 3.9 You handle your customer professionally.

On the overall, it is deduced that service delivery in organizations are generally High with a mean of 2.76 as the overall mean index (Grand average mean) for the six aspects, which confirmed that the level of service delivery Sections and Partners of UNAMID is High where stakeholders agreed with it.

4. There was a significant relationship between the extent of procurement procedures and the level of supply delivery in the African Union-United Nations Hybrid Operation in Darfur

Conclusions

Based on the findings of this study, the following conclusions were drawn:

1. Participants of the study were satisfied with the extent of procurement procedures and level of supply delivery adopted African Union-United Nations

Hybrid Operation in Darfur. As indicated by the high only both in independent and dependent variable. Since the ratings were confined only from very high to low level, the participants in the African Union-United Nations Hybrid Operation in Darfur under study As for the null hypothesis, results indicated a positive significant relationship between procurement procedures and level of supply delivery leading to a conclusion that the more attention procurement procedures is given in the firm, the more, the supply delivery at UNAMID in Sudan.

2. The Theory of Constraints of Goldratt (2008) were this study was based was proven to be correct as revealed in the findings. He offers a substitute, called throughput accounting, which uses throughput in place of output and considers labor as a fixed rather than as a variable cost. He defines inventory simply as everything the organization owns that it plans to sell, including buildings, machinery, and many other things. The result has been dramatically increased reliance on key supplier, often accompanied by the development of more complex supplier interactions with growing numbers of touch points and dependencies.

Originality

Through these findings, the author feels that original contributions have been made thus: Although people have measured the effect of procurement procedures and levels of supply delivery nobody has done it in African Union-United Nations Hybrid Operation in Darfur (UNAMID). To the best of my knowledge no one has establish in depth Procurement procedures and levels of supply delivery, least of all to the procurement industry. It is true that other scholars may have taken these measures but none of them has, jointly correlated procurement procedures with supply delivery. It is therefore, the researcher's claim that this is an original contribution.

RECOMMENDATIONS

In light with the findings of the study, the following pointers were suggested:

1. The governing body of African Union-United Nations Hybrid Operation in Darfur under study should thoroughly look into the weak points both in the practice of procurement procedures and supply delivery and identify ways on how to enhance and rectify further on these areas such as:

a. Procurement procedures

- a.1 Make it imperative for executives and risk managers to reassess how they manage the growing number of risks facing their organizations, especially those affecting supply chains.
- a.2 Need to establish an effective monitoring and evaluation of the UN Procurement systems to determine capacity gaps at individual, organizational and country levels..
- a.3 Emphasize the importance of consistent political commitment and support from the highest levels of government.
- a.4 Place risk managers at the heart of the supply chain process by taking the time and effort to become intimately familiar with all the components that drive this critical business process.
- a.5 Develop an effective quality strategy built on the strengths and core competencies whilst minimizing any mishaps that may be experienced to proposed changes.
- a.6 Human resource departments should at least address some of the immediate concerns of the staff so that elements of corruption, selfishness and personal intrigue can be overcome.
- a.7 Establish the concept of quality as the foundation stone on which the culture and structure of the organisation is built. And ensure that quality becomes identical with each activity the local government undertakes.
- a.8 effectively screen the people being offered employment in UN

missions; they should be on merit and not other factors like relation, Effective coordination of agencies on corruption issues and is comprised of procurement sections' major anti-corruption institutions, including the civil and military among others

b. Supply delivery

- b.1 Maintain complete, accurate, and forward looking supplier information
- b.2 building short-term resiliency at the cost of long-term vulnerability
- b.3 Monitor the supply chain
- b.4 Seek for advise from properly qualified people who will provide them with information that is reliable and accurate
- b.5 Identify Risk Mitigation Strategies
- b.6 Train well-rounded and effective procurement specialists who are able to understand and respond to challenges within the procurement profession
- b.7 Care must be taken to avoid the development of relationships with a particular party or parties which could hinder a fair and open process or limit competition.
- b.8 If a contracting authority is refused supplies on the basis that there is an exclusive supplier supplying goods in the contracting authority's area, the matter should be brought to the attention of the Competition Authority.
- b.9 Contracting authorities should be aware of potential conflicts of interest in the tendering process and should take appropriate action to avoid them.
- b.10 ensure that project specifications and criteria should be as open and generic as possible in order to avoid favouring any one solution or any one party.
- b.11 ensure that tenderers have regard to statutory provisions relating to minimum pay, legally binding industrial or sectorial agreements and relevant health and safety issues, when preparing tenders.

b.12 seeking tenders from other suppliers, service providers or contractors, outside the region in which there is an exclusive distributor.

2. To reinforce the recommendations mentioned above, African Union-United nations Hybrid Operation under study should present the findings of the research and proposed strategies encounter them.

Areas for further research

The researcher proposes that further research could be done along the following areas. (1) A similar study in other the same area be conducted in several organisation to enrich the findings of this study. And (2) the issues of employee training , awarding tenders and qualification of the tenders should be given a thorough research

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APPENDICES

APPENDIX 1A: TRANSMITTAL LETTER FROM COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)



Ggaba Road - Kansanga
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E- mail: admin@kiu.ac.ug,
Website: www.kiu.ac.ug

OFFICE OF THE COORDINATOR, BUSINESS AND MANAGEMENT COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)

December 6, 2011

**RE: REQUEST FOR S. GAVRIL SALL MBA/20054/82/DF
TO CONDUCT RESEARCH IN YOUR ORGANIZATION**

The above mentioned is a bonafide student of Kampala International University pursuing a Masters of Business Administration.

He is currently conducting a field research of which the title is "**Procurement and Supply Delivery in African Union -United Nations Hybrid operation in Darfur (UNAMID), the Republic of Sudan.**"

Your organization has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with the pertinent information he may need.

Any information shared with him from your organization shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,


Mr. Malinga Ramadhan
Coordinator
Business and Management, (CHDR)



APPENDIX 1B: TRANSMITTAL LETTER FROM THE RESPONDENTS

AFRICAN UNION
الاتحاد الأفريقي



UNAMID



UNITED NATIONS
الأمم المتحدة

2012-03-01

The Coordinator, Business and Management.
College of Higher Degrees and Research
Kampala international university
P.O Box 20000-Ggaba-Road
Kampala-Uganda

Dear Sir,

**SUBJECT : RESEARCH PERMISSION FOR MR. S. GAVRIL SALL
REG. NUMBER MBA/20054/82/DF**

With reference to letter dated December 6th, 2011, in which you requested for permission to conduct a research in our organization for Mr. S. Gavril Sall. I wish to acknowledge your letter and assure you that I intend to give Mr. Sall all support in partial fulfillment of the requirements for the Degree of Master of Business Administration-Procurement and Supply Chain Management

I am giving my consent to be part of the research study and I shall be assured of privacy, anonymity and confidentiality and that I will be given the option to refuse participation and right to withdraw my participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

Thus, permission has been granted to him to go ahead until the necessary data is collected.

Truly yours,

Ishtiaq Aslam

Chief Procurement Officer

Tel: +249-922-41-0021

E-mail: ishtiaq@un.org

subject to: 1. No proprietary or confidential nature information is shared externally.
2. The research result will be shared / cleared by this officer prior to release

APPENDIX II: CLEARANCE FROM ETHICS COMMITTEE

Date _____

Candidate's Data

Name _____

Reg.# _____

Course _____

Title of Study _____

Ethical Review Checklist

The study reviewed considered the following:

- ___ Physical Safety of Human Subjects
- ___ Psychological Safety
- ___ Emotional Security
- ___ Privacy
- ___ Written Request for Author of Standardized Instrument
- ___ Coding of Questionnaires/Anonymity/Confidentiality
- ___ Permission to Conduct the Study
- ___ Informed Consent
- ___ Citations/Authors Recognized

Results of Ethical Review

- ___ Approved
- ___ Conditional (to provide the Ethics Committee with corrections)
- ___ Disapproved/ Resubmit Proposal

Ethics Committee (Name and Signature)

Chairperson _____

Members _____

APPENDIX IVA: FACE SHEET: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Direction:

Please provide information about yourself. Kindly **tick or fill out** in the blank spaces of each option;

Code# _____ **Date received by respondent** _____

Organization (Company) Staff

a. Gender: Male _____ Female _____

b. Age: 20-39 years _____

40-59 years _____

60 years and above _____

c. Marital status: Married _____ Single _____ Divorced _____ Widowed _____

d. Educational level:

Certificate _____ Masters _____

Diploma _____ Ph.D. _____

Bachelors _____ Others (please specify) _____

e. Your position/post in the Procurement:

f. Number of years in company staff:

APPENDIX IVB: QUESTIONNAIRE TO DETERMINE THE LEVEL OF PROCUREMENT PROCEDURES

Direction: Please write your preferred option on the space provided before each item. Kindly use the rating guide below:

Response Mode	Rating	Description
Strongly Agree	(4)	You agree with no doubt at all.
Agree	(3)	You agree with some doubt
Disagree	(2)	You disagree with some doubt
Strongly Disagree	(1)	You disagree with no doubt at all

NO	Items on Level of Procurement Procedures				
	Request for Proposal	Rating			
1	You informs suppliers that an organization is looking to procure and encourages them to make their best effort.	1	2	3	4
2	You requires the company to specify what it proposes to purchase.	1	2	3	4
3	A clear standard of procurement meets quality expectations.	1	2	3	4
4	You follow a structured evaluation and selection procedure	1	2	3	4
5	You ensures that suppliers respond factually to the identified requirements	1	2	3	4
	Request for Information	1	2	3	4
6	You state concern related to the omission or misapplication of a product	1	2	3	4
7	You seek further clarification of the building owner's intended use	1	2	3	4
8	It is acceptable for the subcontractor to use an request for information to call attention to an inferior product that may not meet the building owner's needs.	1	2	3	4
9	You use your expertise to recommend the better/correct product	1	2	3	4
10	You schedule time period for deliverables and payments	1	2	3	4
	Request for Quotation				
11	You compare costs from various suppliers	1	2	3	4
12	The Request for Quotation involves more than the price per item.	1	2	3	4
13	Information like payment terms, quality level per item or contract length are possible to be requested during the bidding process	1	2	3	4
14	The suppliers have to return the bidding by a set date and time	1	2	3	4
15	You hold discussions on the bids	1	2	3	4
	Request for Tender				
16	Evaluation team go through the tenders and decide who will get the contract	1	2	3	4
17	Request for Tender may be distributed to potential bidders through a tender service	1	2	3	4
18	You ask for information about the suitability of the business and cost involved	1	2	3	4
19	You inquire for availability of goods and service(items)	1	2	3	4
20	You investigate for the experience of the supplier	1	2	3	4

APPENDIX IVC: QUESTIONNAIRE TO DETERMINE THE EXTENT OF SUPPLY DELIVERY

Direction: Please write your preferred option on the space provided before each item. Kindly use the rating guide below:

Response Mode	Rating	Description
Strongly Agree	(4)	You agree with no doubt at all.
Agree	(3)	You agree with some doubt
Disagree	(2)	You disagree with some doubt
Strongly Disagree	(1)	You disagree with no doubt at all

NO	Items on Level of Procurement Procedures	Rating			
	Request for Proposal				
1	Procurement criteria	1	2	3	4
2	There is a Procurement cost attached.	1	2	3	4
3	We have a Supply schedule	1	2	3	4
4	There is a vendor service capability	1	2	3	4
5	Vendor training and development	1	2	3	4
6	There is vendor selection and management	1	2	3	4
7	There is a vendor-company relationship	1	2	3	4
8	There is quality specification	1	2	3	4
9	We always make –or-buy decision	1	2	3	4
	Tendering criteria				
10	There is provision of financial record	1	2	3	4
11	There is calling of various suppliers	1	2	3	4
12	Customer relationship management is linked to continued growth in sales	1	2	3	4
13	I have design of package required for handling and storage	1	2	3	4
14	Customer service and information is vital for business success and retaining potential customers	1	2	3	4
15	We have Scrap value of the package	1	2	3	4
	Experience in supplier				
16	Material handling equipment and operating costs	1	2	3	4
17	Storage and retrieval frequency of goods	1	2	3	4
18	Usual life and resale or scrap value of equipment.	1	2	3	4
19	Material handling equipment selection and replacement policies	1	2	3	4
20	Safe, smooth and speedy placing and positioning of goods to facilitate their movement and storage	1	2	3	4

Thank you for your valuable time and cooperation

APPENDIX V: SAMPLE SIZE DETERMINATION

$$s = \frac{P}{1 + P(0.05)^2}$$

Where: P = Population = 350

s = Sample size

0.05 = Level of Significance

Therefore: S = 350

$$1 + 350(0.05)^2$$

$$S = \frac{350}{1 + 350(0.0025)}$$

$$1 + 2.333$$

$$S = \frac{350}{2.333}$$

$$= \frac{350}{2.333}$$

$$= \frac{350}{2.333}$$

$$= \frac{350}{2.333}$$

$$= \underline{\underline{150}}$$

APPENDIX VI: INSTRUMENT VALIDITY DETERMINATION

Formulae for content validity index (CVI)

$$\text{CVI} = \frac{\text{the number of relevant questions}}{\text{The total number of questions}}$$

**APPENDIX VII: Summary of Average Mean for Constructs on
Procurement Procedure**

TABLE 9

Average Mean for Constructs on Procurement Procedure

Constructs	Average mean	Interpretation	Rank
Request for Proposal	2.93	High	1
Request for Information	2.81	High	2
Request for Quotation	2.72	High	3
Request for Tender	2.63	High	4
General average mean	2.77	High	

**APPENDIX VIII: Summary of Average Mean for Constructs on Supply
Delivery**

Table 10

Average Mean for Constructs on Supply Delivery

Constructs	Average mean	Interpretation	Rank
Procurement criteria	2.76	High	1
Experience in supplier	2.76	High	2
Tendering criteria	2.70	High	3
General average mean	2.74	High	

RESEARCHER'S CURRICULUM VITAE

1. Personal Profile

First Name : Solomon Gavril
 Family NAME : SALL
 GENDER : MALE
 MARITAL STATUS : Married
 NATIONALITY : Liberian
 DATE OF BIRTH : 30 Nov 1966
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2. Educational Background

Year	School/Institution	Award Obtained
Feb 2009 - Present	Kampala International University (College of Opened and Distance Learning)	Masters Business Administration (MBA) - Procurement and Supply Chain Management
Mar 1988 – Sep 1996	University Of Liberia Monrovia, Liberia	Bachelor's Business Administration (BBA)
Aug 2001 - Nov 2002	West Africa Institute of Computer Studies, Monrovia, Liberia	Certificate MS-DOS,MS-Word, MS-Excel, Quick Books Pro, Word Perfect 6.0
Mar 1988 - Apr 1990	Flavour Wild Airline and Hotel management Studies, Inc. Monrovia, Liberia	Diploma - Hotel Management
Mar 1984 – Dec 1986	Monrovia Central High School Monrovia, Liberia	High School Diploma and West African West Examination Council Senior High School Education Certificate.

Mar 1981 – Dec 1983	G.W Gibson Junior High School Monrovia, Liberia	Junior High School Certificate and West African Examination Council Junior High School Education Certificate
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3. Working Experience/Background

Year	School/Institution	DESIGNATION
Jun 2008 - Present	UNAMID Headquarters Agricultural Research Corporation Compound (ARC) West El Fasher El Fasher, North Darfur, Darfur Sudan DPKO Peace Keeping Mission African Union-United Nations Hybrid Operations in Darfur (UNAMID) Fax:+249 92 244 3731 Tel: +1 917 367 2705 Extension 7428	Procurement Assistant
Jun 2007 - Apr 2008	West Kanana Sugar Factory Compound Obeid Khatim Street, Ryhadr Khartoum, Khartoum 11111 Sudan	Procurement Assistant/Team Leader
Oct 2004 - Mar 2005	Local Non-Governmental Organization Old Road, Behind Kailondo Hotel P.O. Box 10-4351, E- Mail:jathompson@yahoo.com; cesdilib@hotmail.com; Mobile:+231-4-718-926; +231-6-516-40; Congo Town, Oldest Congo Town Township Monrovia, Montserrado County 1000-10 Liberia	Finance Officer
Oct 2002 - Aug 2004	Learning Institution Snapper Hill, Broad Street P.O. Box 10-0568 Monrovia, Montserrado County 1000-10 Liberia	Business Manager
Oct 2001 - Sep 2002	Trader Broad Street , Monrovia, Montserrado County 1000-10 Liberia	Chief Accountant
Aug 1999 - Sep 2001	Government Agency Ministry of Public Works, Lynch Street Monrovia, Montserrado County 1000- 10 Liberia	Accountant
Jan 1998 - Jul 1999	Courier Services P.O Box 10-925, Ashmun Street Tel. +2316511201; arthurbabdullai@yahoo.com Monrovia, Montserrado County 1000- 10 Liberia	Chief Accountant

Mar 1997 - Jan 1998	Human Rights Advocacy Group - Local Non-Governmental Organization Address of Employer Whisnant's Building, Oldest Congo Town P.O. Box 10-6123, E-Mail:lhrcinc1991@yahoo.com; Tel:+231-77-030-394/ +231-4-720-358 Tubman Boulevard Monrovia, Montserrado County 1000-10 Liberia	Accounts Officer
Mar 1994 - Feb 1997	Private Sector Corner Broad and Johnson Street Tel. +23177013760/2316553753; hkzawu@yahoo.com Monrovia, Montserrado 1000-10 Liberia	Chief Accountant
Jan 1994 - Feb 1994	Services/Public Relations YMCA Building Crown Hill, Broad Street Monrovia, Montserrado 1000-10 Liberia	Promotion Coordinator
Jan 1993 - Jan 1994	Trader Capitol By Pass Monrovia, Montserrado 1000-10 Liberia	Administration/Accounts
Apr 1987 - Jun 1990	Hotel Accommodation Coconut Plantation Community Mamba Point Monrovia, Montserrado County Liberia	General Manager
Feb 1985 - Mar 1986	Hotel Manage and Accommodation Carey Street Central Monrovia Monrovia, Montserrado County Liberia	Desk Manager

4. Personal Achievements.

Certificate: Collaborative Negotiation Skills Training 08-09 March 2010; Certificate: Ethics Training 13 March 2010; Attended third Mercury II Training Darfur, Sudan; Certificate: Training Course on Fundamentals of UN Procurement 6 - 16 October 2008; Excellent working skills in Sun Systems (Finance Database) Improvement in my Managerial Skills. Enable to easily work and relate to people from different cultural background

5. List any office machines or equipment you can use:

Computer Equipment and parts thereof; other equipment includes Photocopier, Digital sender, Fax Machine and all equipment that may be available for use.

6. Other specific skills

MS-DOS, Word Perfect, Lotus 1-2-3, Ms-Word, Ms-Excel, Quick Books Pro, MS-Publisher, MS-PowerPoint, MS-Access

7. Language skills

Language	Mother Tongue	Read	Write	Speak	Understand	Have you passed the UN Proficiency Exam for this language?
English	Yes	Easily	Easily	Easily	Easily	N/A
French	No	Easily	Easily	Not easily	Easily	No

PROFESSIONAL REFERENCES

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