



**REPUBLIC OF KENYA**

**LEARNING GUIDE**

**FOR**

**SUPPLY CHAIN MANAGEMENT**

**LEVEL 6**



TVET CDACC  
P.O BOX 15745-00100  
NAIROBI



First Published 2019  
Copyright TVET CDACC

All rights reserved. No part of this Supply Chain Management learning guide may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods without the prior written permission of the TVET CDACC, except in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by copyright law. For permission requests, write to the Council Secretary/CEO, at the address below:

**Council Secretary/CEO**  
**TVET Curriculum Development, Assessment and Certification Council**  
**P.O. Box, 15745–00100**  
**Nairobi, Kenya**  
**Email: [cdacc.tvet@gmail.com](mailto:cdacc.tvet@gmail.com)**

## **FOREWORD**

The provision of quality education and training is fundamental to the Government's overall strategy for social economic development. Quality education and training will contribute to the achievement of Kenya's development blue print and sustainable development goals. This can only be addressed if the current skill gap in the world of work is critically taken into consideration.

Reforms in the education sector are necessary for the achievement of Kenya Vision 2030 and meeting the provisions of the Constitution of Kenya 2010. The education sector has to be aligned to the Constitution and this has triggered the formulation of the Policy Framework for Reforming Education and Training (Sessional Paper No. 4 of 2016). A key provision of this policy is the radical change in the design and delivery of the TVET training, which is the key to unlocking the country's potential in industrialization. This policy document requires that training in TVET be Competency Based, Curriculum development be industry led, certification be based on demonstration and mastery of competence and mode of delivery allow for multiple entry and exit in TVET programs.

These reforms demand that industry takes a leading role in TVET curriculum development to ensure the curriculum addresses and responds to its competence needs. The learning guide in Supply Chain Management enhances a harmonized delivery of the competency-based curriculum for Supply Chain Management Level 6. It is my conviction that this learning guide will play a significant role towards supporting the development of competent human resource for the Supply Chain Management sector's growth and sustainable development.

**PRINCIPAL SECRETARY, VOCATIONAL AND TECHNICAL TRAINING  
MINISTRY OF EDUCATION**

## **PREFACE**

Kenya Vision 2030 is anticipated to transform the country into a newly industrializing and “middle-income country providing a high-quality life to all its citizens by the year 2030.” The Sustainable Development Goals (SDGs) further affirm that the manufacturing sector is an important driver to economic development. The SDG nine that focuses on building resilient infrastructures, promoting sustainable industrialization and innovation can only be attained if the curriculum focuses on skill acquisition and mastery. Kenya intends to create a globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through life-long education and training.

TVET has a responsibility of facilitating the process of inculcating knowledge, skills and attitudes necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency Based Education and Training (CBET). The Technical and Vocational Education and Training Act No. 29 of 2013 and the Sessional Paper No. 4 of 2016 on Reforming Education and Training in Kenya, emphasized the need to reform curriculum development, assessment and certification to respond to the unique needs of the industry. This called for a shift to CBET to address the mismatch between skills acquired through training and skills needed by industries, as well as, increase the global competitiveness of Kenyan labor force.

The TVET Curriculum Development, Assessment and Certification Council (TVET CDACC), in conjunction with industry/sector developed the Occupational Standards, which were the basis of developing competency-based curriculum and assessment of an individual for competence certification for a Supply Chain Management level 6. The learning guide is geared towards promoting efficiency in curriculum delivery.

This learning guide is designed and organized with clear and interactive learning activities for each learning outcome of a unit of competency. The guide further provides information sheet, self-assessment, tools, equipment, supplies, and materials and references. I am grateful to the Council Members, Council Secretariat, Supply Chain Management experts and all those who participated in the development of this learning guide.

**Prof. CHARLES M. M. ONDIEKI, PhD, FIET (K), Con. Eng Tech.  
CHAIRMAN, TVET CDACC**

## **ACKNOWLEDGEMENT**

This learning guide has been designed to support and enhance uniformity, standardization and coherence in implementing TVET Competency Based Education and training in Kenya. In developing the learning guide, significant involvement and support was received from various sectors and organizations.

I recognize with appreciation the critical role of the participants drawn from technical training institutes, universities, private sector and consultants in ensuring that this learning guide is in-line with the competencies required by the industry as stipulated in the occupational standards and curriculum. I also thank all stakeholders in the Supply Chain Management sector for their valuable input and all those who participated in the process of developing this learning guide.

I am convinced that this learning guide will go a long way in ensuring that workers in Supply Chain Management sector acquire competencies that will enable them to perform their work more efficiently and make them enjoy competitive advantage in the world of work.

**DR. LAWRENCE GUANTAI M'ITONGA, PhD**  
**COUNCIL SECRETARY/CEO**  
**TVET CDACC**

## TABLE OF CONTENTS

|                        |      |
|------------------------|------|
| FOREWORD .....         | II   |
| PREFACE .....          | III  |
| ACKNOWLEDGEMENT .....  | IV   |
| TABLE OF CONTENTS..... | V    |
| LIST FIGURES .....     | VIII |
| LIST OF TABLES.....    | IX   |
| ACRONYMS .....         | X    |

|                                                         |   |
|---------------------------------------------------------|---|
| CHAPTER 1: INTRODUCTION .....                           | 1 |
| 1.1. Background Information.....                        | 1 |
| 1.2. The Purpose of Developing the Learning Guide ..... | 1 |
| 1.3. Layout of the Trainee Guide .....                  | 2 |
| Learning Activities .....                               | 2 |
| Information Sheet.....                                  | 2 |
| Self-Assessment .....                                   | 2 |
| Core Units of Learning.....                             | 3 |

|                                                                                                        |    |
|--------------------------------------------------------------------------------------------------------|----|
| CHAPTER 2: PROCUREMENT OF GOODS AND SERVICES/PROCURE<br>ORGANIZATIONS' GOODS AND SERVICES .....        | 4  |
| 2.1 Introduction .....                                                                                 | 4  |
| 2.2 Performance Standard .....                                                                         | 4  |
| 2.3 Learning Outcomes .....                                                                            | 4  |
| 2.3.1 List of learning outcomes .....                                                                  | 4  |
| 2.3.2 Learning Outcome No 1: Plan for procurement of organizations' goods, works<br>and services. .... | 5  |
| 2.3.3 Learning Outcome No 2: Procure organizations' goods, works and services..                        | 16 |
| 2.3.4 Learning Outcome No 3: Take charge of the procured goods .....                                   | 31 |
| 2.3.5 Learning Outcome No 4: Issue procured goods .....                                                | 40 |

|                                                                                         |    |
|-----------------------------------------------------------------------------------------|----|
| CHAPTER 3: WAREHOUSING OF PROCURED GOODS/OVERSEER<br>WAREHOUSING OF PROCURED GOODS..... | 47 |
| 3.1 Introduction .....                                                                  | 47 |
| 3.2 Performance Standard .....                                                          | 47 |
| 3.3 Learning Outcomes .....                                                             | 48 |
| 3.3.1 List of learning outcomes .....                                                   | 48 |
| 3.3.2 Learning Outcome No 1: Design/layout a store/warehouse .....                      | 49 |
| 3.3.3 Learning Outcome No 2: Maintain layout of goods in the store .....                | 57 |
| 3.3.4 Learning Outcome No 3: Maintain records of stored goods .....                     | 64 |
| 3.3.5 Learning Outcome No 4: Maintain quality of stored goods .....                     | 76 |

|                                                                  |     |
|------------------------------------------------------------------|-----|
| 3.3.6 Learning Outcome No 5: Maintain optimum stock levels ..... | 91  |
| 3.3.7 Learning Outcome No 6: Secure stored goods .....           | 100 |

|                                                                                        |     |
|----------------------------------------------------------------------------------------|-----|
| CHAPTER 4: DISTRIBUTION OF STORED GOODS/ OVERSEE DISTRIBUTION<br>OF STORED GOODS ..... | 109 |
| 4.1 Introduction.....                                                                  | 109 |
| 4.2 Performance Standard.....                                                          | 109 |
| 4.3 Learning Outcomes.....                                                             | 109 |
| 4.3.1List of learning outcomes .....                                                   | 109 |
| 4.3.2 Learning Outcome No 1: Establish Goods Distribution Channels.....                | 110 |
| 4.3.3 Learning Outcome No 2: Organize goods distribution logistics .....               | 122 |
| 4.3.4 Learning Outcome No 3: Track movement of goods .....                             | 136 |
| 4.3.5 Learning Outcome No 4: Oversee Delivery of Goods to Customers .....              | 146 |

|                                                                                                    |     |
|----------------------------------------------------------------------------------------------------|-----|
| CHAPTER 5: SUPPLY CHAIN OPERATIONS MANAGEMENT/MANAGE SUPPLY<br>CHAIN OPERATIONS .....              | 159 |
| 5.1 Introduction.....                                                                              | 159 |
| 5.2 Performance Standard.....                                                                      | 159 |
| 5.3 Learning Outcomes.....                                                                         | 160 |
| 5.3.1 List of learning outcomes .....                                                              | 160 |
| 5.3.2 Learning Outcome No 1: Develop Organizations' Procurement and Asset<br>Disposal Policy ..... | 161 |
| 5.3.3 Learning Outcome No2: Plan and Organize Supply Chain Operations .....                        | 170 |
| 5.3.4 Learning Outcome No 3: Manage Procurement Staff .....                                        | 185 |
| 5.3.5 Learning Outcome No 4: Oversee Supply Chain Operations.....                                  | 202 |
| 5.3.6 Learning Outcome No 5: Control Supply Chain Operations. ....                                 | 216 |

|                                                                                   |     |
|-----------------------------------------------------------------------------------|-----|
| CHAPTER 6: PROCUREMENT CONTRACTS MANAGEMENT/MANAGE<br>PROCUREMENT CONTRACTS ..... | 225 |
| 6.1 Introduction.....                                                             | 225 |
| 6.2 Performance Standard.....                                                     | 225 |
| 6.3 Learning Outcomes.....                                                        | 225 |
| 6.3.1 List of learning outcomes .....                                             | 225 |
| 6.3.2 Learning Outcome No 1: Monitor progress of procurement contracts .....      | 226 |
| 6.3.3 Learning Outcome No 2: Manage Vendor Relationships .....                    | 233 |
| 6.3.4 Learning Outcome No 3: Evaluate vendor contract performance .....           | 246 |

## CHAPTER 7: ORGANIZATIONS ASSETS DISPOSAL/DISPOSE

|                                                                              |     |
|------------------------------------------------------------------------------|-----|
| ORGANIZATIONAL ASSETS .....                                                  | 260 |
| 7.1 Introduction .....                                                       | 260 |
| 7.2 Performance Standards.....                                               | 260 |
| 7.3 Learning Outcomes.....                                                   | 261 |
| 7.3.1 List of learning outcomes .....                                        | 261 |
| 7.3.2 Learning Outcome No 1: Monitor progress of procurement contracts ..... | 262 |
| 7.3.3 Learning Outcome No 2: Classify assets for Disposal .....              | 270 |
| 7.3.4 Learning Outcome No 3: Execute Disposal Orders .....                   | 276 |
| 7.3.5 Learning Outcome No 4: Prepare disposal orders.....                    | 284 |

## LIST FIGURES

|                                                                      |     |
|----------------------------------------------------------------------|-----|
| Figure 1: Procurement cycle .....                                    | 7   |
| Figure 2: Approving procurement Plan 1 .....                         | 12  |
| Figure 3: Legal Process.....                                         | 19  |
| Figure 4: Relationship between cost to make and cost to buy .....    | 22  |
| Figure 5: Supplier Evaluation .....                                  | 26  |
| Figure 6: procurement cycle .....                                    | 50  |
| Figure 7: Diagonal designed warehouse .....                          | 52  |
| Figure 8: Warehouse layout .....                                     | 54  |
| Figure 9: Warehouse Storage Process.....                             | 59  |
| Figure 10: Store ledger sample .....                                 | 66  |
| Figure 11: Purchases .....                                           | 67  |
| Figure 12: Expenses.....                                             | 67  |
| Figure 13: Returned goods.....                                       | 67  |
| Figure 14: Supplier Payment .....                                    | 67  |
| Figure 15: Sold goods .....                                          | 68  |
| Figure 16: Returned goods by customers.....                          | 68  |
| Figure 17: End of period .....                                       | 68  |
| Figure 18: Purchasing order form .....                               | 71  |
| Figure 19: Delivery receipt .....                                    | 72  |
| Figure 20: Payment Voucher .....                                     | 73  |
| Figure 21: Warehouse Pest Control .....                              | 82  |
| Figure 22: Poorly Ventilated Warehouse.....                          | 83  |
| Figure 23: Warehouse Maintenance .....                               | 88  |
| Figure 24: Stock Control Flow .....                                  | 93  |
| Figure 25: Balancing customers service vs inventory control .....    | 94  |
| Figure 26: Inventory management .....                                | 94  |
| Figure 27: Google Alerts .....                                       | 111 |
| Figure 28: Alert Preview.....                                        | 112 |
| Figure 29: Sales Journal.....                                        | 112 |
| Figure 30: Customer Relation Chart .....                             | 113 |
| Figure 31: Flow chart Selling Process .....                          | 114 |
| Figure 32: Illustration of Public Procurement Legal framework.....   | 163 |
| Figure 33 Process/Illustration/ procedure in procurement cycle ..... | 164 |
| Figure 34 Illustration on evaluation of policy implementation .....  | 166 |
| Figure 35: Sample of Departmental Organizational Structure .....     | 176 |
| Figure 36: Capacity Development Diagram .....                        | 197 |
| Figure 37: Sample Report .....                                       | 212 |
| Figure 38: vendor performance evaluation form .....                  | 251 |

## LIST OF TABLES

|                                                            |     |
|------------------------------------------------------------|-----|
| Table 1: Summary of Core Units of Competencies .....       | 3   |
| Table 2: Sample of procurement plan .....                  | 12  |
| Table 3 Sample of an issue slip.....                       | 41  |
| Table 4: Types and characteristics of delivery notes ..... | 151 |
| Table 5 an illustration of a delivery note .....           | 155 |
| Table 6: Induction Plan .....                              | 189 |
| Table 7: The induction process .....                       | 189 |
| Table 8: Procurement management plan.....                  | 210 |

## ACRONYMS

|       |                                                              |
|-------|--------------------------------------------------------------|
| BC    | Basic Competency                                             |
| CC    | Core Competency                                              |
| CDACC | Curriculum Development, Assessment and Certification Council |
| CO    | Common Units                                                 |
| CRM   | Customer Relationship Management                             |
| CSR   | Corporate Social Responsibility                              |
| CU    | Curriculum                                                   |
| ERM   | Enterprise Resource Management                               |
| ERP   | Enterprise Resource Planning                                 |
| FIFO  | First In First Out                                           |
| ICT   | Information Communication Technology                         |
| IPR   | Intellectual Properties Rights                               |
| KCSE  | Kenya Certificate of Secondary Education                     |
| KNQA  | Kenya National Qualifications Authority                      |
| LIFO  | Last In First Out                                            |
| LPO   | Local Purchase Order                                         |
| LSO   | Local Service Order                                          |
| OS    | Occupational Standard                                        |
| OSHA  | Occupational Safety and Health Standards                     |
| PPE   | Personal Protective Equipment                                |
| QMS   | Quality Management System                                    |
| SOP   | Standard Operating Procedures                                |
| SSAC  | Sector Skills Advisory Committee                             |
| SWOT  | Strength Weaknesses Opportunities and Threats                |
| TVET  | Technical and Vocational Education and Training              |

## **CHAPTER 1: INTRODUCTION**

### **1.1. Background Information**

This learning guide has been developed in line with the functions of TVET CDACC as stipulated in Article 45 (1a) of the Technical and Vocational Education and Training (TVET) Act No. 29 of 2013 and the Sessional Paper No. 2 of 2015 that embraces Competency Based Education and Training (CBET) system. It is, therefore, the sole intent of this document to provide guidelines for a Competency-Based Supply Chain Management curriculum for level 6.

Supply Chain Management (SCM) is an integral part of most businesses and is essential to company success and customer satisfaction. Competencies acquired in supply chain boost customer service, reduces operating costs, and improves financial positioning. In addition to business, Supply Chain Management also plays a critical role in society. SCM knowledge and capabilities can be used to support medical missions, conduct disaster relief operations, and handle other types of emergencies.

This learning guide consists of interactive learning activities, content, further reading, self-assessment and relevant and related references that, enhance the implementation of Supply Chain Management Level 6 qualification. It enables the trainee to acquire the competencies that enable him/her to undertake the various processes in Supply Chain Management. The Guide further provides illustrations, weblinks, case studies, examples and resources on how to implement all the learning outcomes/elements described in the Curriculum and Occupational Standards with a particular focus to a trainee.

### **1.2. The Purpose of Developing the Learning Guide**

Supply Chain Management Level 6 curriculum development process was initiated using the DACUM methodology where jobs/occupations were identified. Further, job analysis charts and occupational standards were generated in collaboration with the industry players under the guidance of TVET CDACC (Curriculum Development Assessment and Certification Council). The result of the process was a Supply Chain Management Level 6 Occupational Standard (OS) and curriculum. The curriculum was further broken down to end up with units of learning. To effectively implement Supply Chain Management Level 6 Occupational standard and curriculum, learning guides are required to provide training content and guide the learners and trainers on the learning process aimed at imparting the relevant knowledge, requisite skills and the right work behavior/attitude to the industry. Learning guides are part of the training materials.

### **1.3. Layout of the Trainee Guide**

The learning guide is organized as per chapters. Chapter one presents the background information and purpose of developing the trainee guide. Each of the units of learning/unit of competency is presented as a chapter on its own. Each chapter presents the introduction of the unit of learning/unit of competency, performance standard and list of the learning outcome/elements in the occupational standards.

#### **Learning Activities**

For each learning outcome, the learning activities are presented by covering the performance criteria statements and trainee's demonstration of knowledge in relation to the range in the occupational standard and content in the curriculum.

#### **Information Sheet**

The information sheet is the section under each learning outcome that provides the subject matter in relation to the definition of key terms, method, processes/procedures/guidelines, content, illustrations (photographs, pictures, video, charts, plans, digital content, and simulation) and case studies.

#### **Self-Assessment**

Self-assessment is to the performance criteria, required knowledge, skills and the range as stated in the occupational standards. The section further provides questions and assignments in which trainees demonstrate that they have acquired the required competences and an opportunity to reflect on what they have acquired. It is expected that the trainer keeps a record of plans, progress and the problems encountered which will go in the trainee's portfolio. A portfolio assessment consists of a selection of evidence that meets the pre-defined requirements of complexity, authenticity, and reliability. The portfolio starts at the beginning of the training and will be the evidence for the development and acquisition of the competence (summative and formative) by the trainee. It is important to note that Portfolio assessment is highly emphasized in the learning guide.

Finally, the guide presents tools, equipment's, supplies and materials for each learning outcome as guided by the performance criteria in occupational standards and content in curriculum. References, relevant links and addendums are provided for further studying. The units of competency comprising this qualification include the following common and core unit of learning:

## Core Units of Learning

**Table 1: Summary of Core Units of Competencies**

| <b>Unit of Learning Code</b> | <b>Unit of Learning Title</b>     | <b>Duration in Hours</b> | <b>Credit Factors</b> |
|------------------------------|-----------------------------------|--------------------------|-----------------------|
| <b>BUS/CU/SC/CR/01/6</b>     | Procurement of Goods and Services | 100                      | 10                    |
| <b>BUS/CU/SC/CR/02/6</b>     | Warehousing of Procured Goods     | 100                      | 10                    |
| <b>BUS/CU/SC/CR/03/6</b>     | Distribution of stored Goods      | 100                      | 10                    |
| <b>BUS/CU/SC/CR/04/6</b>     | Supply Chain Operates Management  | 100                      | 10                    |
| <b>BUS/CU/SC/CR/05/6</b>     | Procurement Contracts Management  | 100                      | 10                    |
| <b>BUS/CU/SC/CR/06/6</b>     | Organizations Assets Disposal     | 100                      | 10                    |
|                              | Industrial attachment             | 360                      | 36                    |

## **CHAPTER 2: PROCUREMENT OF GOODS AND SERVICES/PROCURE ORGANIZATIONS' GOODS AND SERVICES**

### **2.1 Introduction**

Procurement of goods and services is a core unit of competency offered in the TVET level 6 qualification for supply chain. The unit specifies the competencies required to procure organizations' goods and services. This involves the procurement of goods and services, and administration of the same until they are finally consumed by the organization. The significance of the unit is to foster the acquisition of quality services and products while meeting the needs and goals of an organization, within the acceptable costs.

The critical aspects of competency to be covered include: preparing a procurement plan; conducting market price survey; developing procurement contracts and receiving; and recording and storing procured goods appropriately. The basic resources required include computers, stationery, the Constitution of Kenya 2010, suppliers manual among others. The unit covers four learning outcomes. Each of the learning outcomes presents: learning activities that cover performance criteria statements, thus creating an opportunity to demonstrate knowledge and skills in the occupational standards and contents in the curriculum. The information sheets provide: definition of terms, content and illustrations to guide in training. Assessment may be through written tests, third party reports, oral questioning, interview and observation. Self-assessment is provided at the end of each learning outcome.

### **2.2 Performance Standard**

Procure goods and services by developing a procurement plan, conducting market price survey, evaluating procurement bids, developing procurement contracts and facilitating the signing of goods issued as per organizations' budget and policy.

### **2.3 Learning Outcomes**

#### **2.3.1 List of learning outcomes**

- a. Plan for procurement of organizations' goods, works and services
- b. Procure organizations' goods, works and services
- c. Take charge of procured goods
- d. Issue procured goods

### 2.3.2 Learning Outcome No 1: Plan for procurement of organizations' goods, works and services.

#### 2.3.2.1 Learning Activities

| Learning Outcome No 1: Plan for procurement of organizations' goods, works and services                                                                                                                                                                                                                                                                                                                           |                     |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|
|                                                                                                                                                                                                                                                                                                                                  | Learning Activities | Special Instructions |
| 1.1 Establish availability of funds based on organizations' budget<br>1.2 Establish requirements of the organization (infrastructure, computers, furniture, MROs) based on organizations' work plan<br>1.3 Prepare Procurement plan (departmental plan, procurement consolidated plan) based on requirements of the organization<br>1.4 Approve procurement plan as per organizations' policy and available funds |                     |                      |

#### 2.3.2.2 Information Sheet No2/LO1: Plan for procurement of organizations' goods, works and services.



##### Introduction

This learning outcome will provide knowledge, skills and behavior for establishing availability of funds, requirements of the organization and procurement plan in accordance to the organization's budget, work plan and organization's policy.

##### Definition of key terms

**Procurement:** This is the act of acquiring or obtaining goods, services or works from an external source.

**Procurement plan:** document prepared annually by a procurement entity to plan for procurement requirements, which are necessary for the performance of activities in a procurement entity.

**Goods:** These are tangible commodities that are procured on request to satisfy a need

**Services:** intangible or non-physical products such as cleaning services, which are acquired to satisfy a need.

**Works:** This is a procurement category, which deals with construction, repair, renovation, demolition among others.

**Supply chain:** These are the processes involved in the production and distribution of a commodity

### **Content/procedures/methods/illustrations**

#### **1.1 Establish availability of funds based on organizations' budget**

##### **Organizations Budget**

The procurement department is responsible for acquisition of goods works and services for the organization.

Procurement functions is carried out with adherence to the Public Procurement and Disposal Act, 2005, and the Procurement and Disposal Regulations, 2006.

Its functions are:

1. Procuring raw materials and other resources. It ensures that all the organization's needs are met for smooth operations.
2. Achieving best possible price. A procurement department must continuously evaluate whether they are receiving materials at the best possible prices.
3. Paperwork and accounting. This department handles all of the paperwork involved in purchasing and delivery of supply.
4. Compliance with business protocol. It must ensure that it complies with all company policies.

##### **The procurement cycle**

Effective procurement consists of a series of steps. They include:

- a. Identify need before purchasing. It is necessary to know what (the item) you need to buy and how much (quantity).
- b. Select the supplier once the need has been identified and decisions such as multiple versus single supplier are made. Suppliers with the best values are chosen.
- c. Supplier communication. When a suitable supplier has been identified, request for quotation or tender may be advertised or direct contact made.
- d. Negotiation and award. Detailed negotiations are undertaken, not just about price but rather total cost of ownership.
- e. Follow up. Here, the quality of product and services are looked into, as well as, the accuracy of quantities to determine if improvement is needed in the future.

##### **Reasons why organizations buy goods works and services**

- a) **Cost advantage:** When firms buy commodities, they may have the advantage of economies of scale.
- b) **Satisfy needs:** A major reason for procuring is to satisfy the needs of user departments in an organization.
- c) **Insufficient capacity to produce:** An organization may not be able to produce all the components or services within the organization.

- d) **Lack of expertise:** An organization may not have the necessary technology or specialized personnel to produce the item.
- e) **Quality of commodities:** A procurement department will ensure that the commodities obtained are of the best quality.

### Procurement cycle illustration

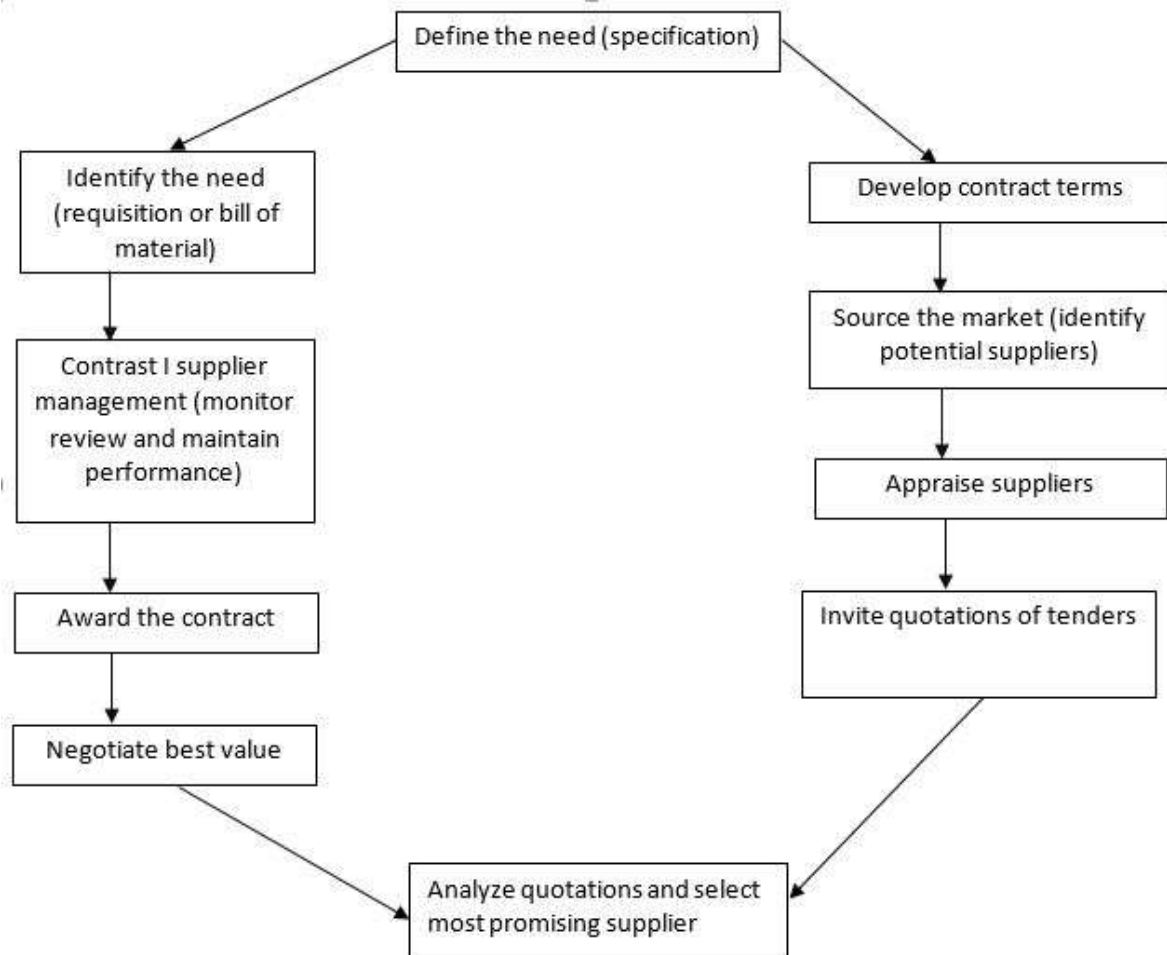


Figure 1: Procurement cycle

### Budget

A formal statement of financial resources set aside by an organization for carrying out specific activities. A budget helps to coordinate the activities of the organization.

**Advantages of budgeting**

- The management is compelled to think about the future.
- Promotes coordination and communication by clearly defining areas of responsibility.
- It provides a basis for performance appraisal, comparison of actual results against the budget plan.
- Remedial action can be taken as variances emerge.
- A budget motivates employees by participating in budget setting.
- Improved allocation of basic resources.
- Economizes management time.

**Problems in budgeting**

- Can be seen as pressure devices that the management has imposed.
- Conflicts among departments over resource allocation.
- Difficult to reconcile individual and corporate goals.
- Waste may arise.
- Some cost is under the influence of more than one person.

**Characteristics of a budget**

- Participation: Involve as many people as possible in the organization.
- Must be comprehensive: Embrace the entire organization.
- Standards: It must be based on established standards of performance.
- Flexible: Allows for any changing circumstances.
- Feedback: Constantly monitor performance.
- Analysis of costs and Revenues: This can be on the basis of product line and departments.

**Budget organization and administration**

- Budget centers: These are units responsible for the preparation of budgets.
- Budget committee: Consists of senior members of the organization for example, heads of departments.
- Budget officer: Controls the budget administration.
- Budget Manual: Contains details on budget procedures, processes and clearly defines the responsibilities of persons involved.

## **1.2 Relationship between procurement department and other functions of the organization**

The procurement department must synchronize with other functions to understand what other department's need, when they need it and when the company can pay for it. Successful relationship between functions depends on clear communication.

### **a). Relationship between purchasing and sales department**

The sales department depends on the purchasing department to have the inventory in place to fulfill completed sales. The purchasing department, in turn, depends on the sales department to allow for enough lead-time between the time that the order had been placed and fulfillment date. The procurement staff can make the process easier by promising customers only what is comfortably possible for the procurement department.

### **b). Relationship between purchasing department and finance department**

This relationship requires an ongoing feedback in both directions. The purchasing department needs to be notified about the possibility and the constraints that the finance department handles and, in turn, the finance department needs to know when purchasing and supply is working towards an upcoming expenditure. The purchasing department may opt to buy in smaller quantities to coordinate with the finance department timeline and available funds.

### **c). Purchasing department and production**

Smooth and timely production depends on having needed parts on hand. Ordering these parts is the responsibility of the purchasing department. In turn, the production departments are responsible for communicating to purchasing and supply staff about what they need with enough lead-time for purchasing to procure without bringing production to a standstill.

### **d). Purchase and design engineering**

Engineering has the initial responsibility for preparing the technical specifications for organizations' products and the materials that go into them. To exercise this effectively, the design and engineering must have constant help of procurement functions. If profit is to be maximized, materials specified by design and engineering must be both economical to procure and fabricate and be available from more than one efficient, low cost producer.

## **Documents used in the procurement process**

### **1. Request for proposal (RFP)**

This is an early stage in the procurement process, which involves issuing an invitation for supplies often through a bidding process to submit a proposal on a specific commodity or service.

### **2. Request for information (RFI)**

A proposal is requested from a potential service provider to determine what products and services are potentially available in the market and to know the capability of a seller in terms of offering and strength.

### **3. Request for quotation (RFQ)**

Used when discussions with bidders are not required and when price is the main or only factor in selecting a successful bidder.

### **4. Solicitation**

Invitations of bids request for quotations and proposals.

### **5. Offers**

This type of document is bids, proposals and quotes made by potential suppliers to prospective clients.

### **6. Contracts**

Final signed agreements between clients and suppliers.

### **7. Amendments**

Changed in solicitations, offers and contracts.

## **1.2 Requirements of the organization**

Every organization has plans and requirements that determine how it will progress into the future. The strategic planners and management of the organization in consultation with staff, determine most of these requirements. Other requirements are externally imposed, such as the legislation the organization is required to comply with.

### **Examples of organizational requirements.**

- a. The organization's vision, goal, objectives and priorities.
- b. Business and performance plans.
- c. Systems, processes and requirements for quality assurance.
- d. Specific change initiatives.
- e. Legal requirements e.g. occupational health and safety, anti-discrimination legislation.
- f. Standards (such as for ethical behavior) and protocols.
- g. Confidentiality and security requirements.
- h. Defined resource parameters.

## **Key organizational components**

- a. Leadership:** Leaders must be fully committed to the implementation of the system.
- b. Organization structure:** Structure of the organization should be clearly defined and should be reflected by a function organization.
- c. Planning process:** skills for planning are needed and financial and time factor considered.
- d. Implementation:** This includes the management of project and activities, directing resources to accomplish plans and assuring timeliness.
- e. Monitoring:** As components of the quality management system are put in place, processes for monitoring will be needed to ensure that the system is working.

### **1.3 Prepare Procurement plan (departmental plan, procurement consolidated plan) based on requirements of the organization**

#### **Procurement plan**

It is a document prepared by each procurement entity annually to plan all procurement requirements necessary for the activity plan of the procuring entity.

#### **Contents of a procurement plan**

- a) Detailed breakdown of required goods, work and services.
- b) Schedule of planned delivery, implementation or completion dates.
- c) Estimate value of each procurement packages.
- d) Source of funding.
- e) Procurement method and justification.
- f) Details of any committed or planned procurement expenditure.
- g) Rules applicable to the procurement.
- h) Warehouse requirement.
- i) Mode of procuring.
- j) Timelines of the critical stages of the delivery or implementation program.

#### **Types of procurement plan**

##### **a. Strategic procurement Planning**

It is concerned with value and risk in planning with focus on:

- Market influence.
- Environment scanning.
- Aligning procurement to policy objectives.
- Value and risk analysis.

## b. Operational procurement plans

Focuses on:

- Quantity of goods and services it procures.
- Budgeting or spends.
- Supplier.

Table 2: Sample of procurement plan

| Project name                            |                   |                                |                    |                   |                                 |          |
|-----------------------------------------|-------------------|--------------------------------|--------------------|-------------------|---------------------------------|----------|
| Project packages                        |                   |                                |                    |                   |                                 |          |
| Description of goods works and services | XYZ Contract type | Pricing / Compensation options | Supplies / Vendors | Selected supplier | Value reported on vendors tasks | Comments |
|                                         |                   |                                |                    |                   |                                 |          |

### 1.4 Approve procurement plan as per organizations' policy and available funds

Approving procurement plan Illustration.

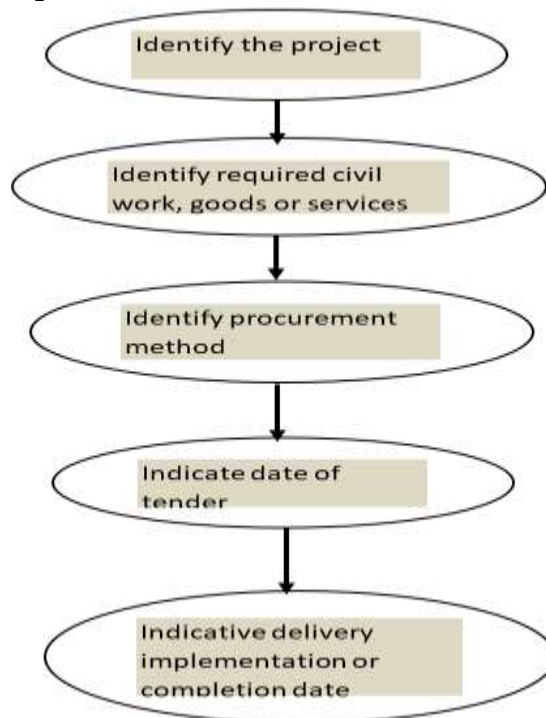


Figure 2: Approving procurement Plan 1

The procurement plan must be integrated into the budget processes based on the approved budget. The budget and the procurement plan shall be based on a realistic cost estimates by the procurement unit.

The procurement units should verify the departmental procurement plans to ensure that they are representative of operational requirements. The plan must be approved by the head of the procuring entity before it is implemented so as to modify the plan according to available resources.

## Conclusion

By the end of this learning outcome, the trainee should be able to develop a consolidated procurement plan and establish the requirements of an organization based on the organization's work plan and policy.

## Further Reading



A guide to strategic procurement Plan (2016) Asian development bank. ISBN 978-92-9261-264-1 (print), 978-92-9261-265-8 (electronic) Publication Stock No. TIM189436-2 DOI: <http://dx.doi.org/10.22617/TIM189436-2>

## 2.3.2.3 Self-Assessment



### Written assessment

1. Which one of the following is not a good?
  - a) Iron sheets
  - b) Cleaning
  - c) Stationary
  - d) Paper clips
2. Which one best describes works.
  - a) Tangible, separable, transferable.
  - b) Inseparable, intangible, non-transferable.
  - c) Separable, intangible, non-transferable.
3. Procurement planning is the acquisition of goods, services or works for an organization
  - a) True
  - b) False

4. Which one of the following is not content of a file created at time of contract award?
  - a) Quotation
  - b) Payment record
  - c) Procurement contract
  - d) Progress report
5. Which one of the following is a characteristic of a service?
  - a) Transferable
  - b) Tangible
  - c) Separable
  - d) Inseparable
6. State the characteristics of goods services and works.
7. Describe five components of a procurement plan.
8. State five advantages of procurement planning.
9. Explain three types of budget.
10. Discuss two departments that relate with procurement and their functions.

#### **Oral Assessment**

1. What is the role of procurement plan in an organization?
2. Discuss the procurement cycle.
3. Reasons why organizations procure.

#### **Practical Assessment**

1. You have been hired by XYZ Company limited as the supply chain manager. Come up with a procurement plan for that financial year that satisfy all the organization needs
2. A need has arisen in your organization and you are tasked to look for suppliers. Describe the methods that you will use to ensure that you get the best possible supplier.

#### **2.3.2.4 Tools, Equipment, Supplies and Materials**

- Computers.
- Stationery.
- Classrooms and classroom resources.
- The constitution of Kenya 2010.
- Public Procurement and Asset Disposal Act 2015 and its regulations.
- Public Officers Ethics Act.
- Anti-corruption and Economic Crimes Act 2003.
- Public Finance Management Act 2012.
- Suppliers Manual.
- Sample Procurement Documents (Goods received note, Delivery notes, Stock control cards and Counter issue voucher among others).
- Sample Case Studies on Procurement, 2009.

#### **2.3.2.5 References**

- Azambuja, M. M., Ponticelli, S., & O'Brien, W. J. (2014). Strategic Procurement Practices for the Industrial Supply chain. *Journal of Construction Engineering and Management*, 140(7), 06014005.
- Benton, W.C. (2007). *Purchasing and Supply Management*, pvt Publishers.
- Nair, A., Jayaram, J., & Das, A. (2015). Strategic Purchasing Participation, Supplier Selection, Supplier Evaluation and Purchasing Performance. *International Journal of Production Research*, 53(20), 6263-6278.

### 2.3.3 Learning Outcome No 2: Procure organizations' goods, works and services

#### 2.3.3.1 Learning Activities

| Learning Outcome No 2: Procure organizations' goods, works and services           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Special Instructions                       |
|                                                                                   | <p>2.1 Develop prequalification of suppliers as per standard operating procedures.</p> <p>2.2 Develop specifications (quantity, quality, dimensions, service levels, TORs and brand) based on organization policy and laid down regulations.</p> <p>2.3 Conduct market price survey as per standard operating procedures.</p> <p>2.4 Invite procurement bids (Request for Quotations, tender, Request for Proposals, expression of interests) based on requirement of organization.</p> <p>2.5 Subject procurement bids to various levels of evaluation (qualification, technical, financial) as per standard operating procedures.</p> <p>2.6 Award procurement bids to the most responsive bidder based on evaluation reports and negotiations (On terms and conditions).</p> <p>2.7 Develop procurement contracts between the organization and the awarded bidder-based agreement as per standard operating procedures.</p> <p>2.8 Sign procurement contract as per standard operating procedures.</p> <p>2.9 Manage the contract by both parties as per contract agreement.</p> | <p>Group work and class presentations.</p> |

#### 2.3.3.2 Information Sheet No2/LO2: Procure organizations' goods, works and services



##### Introduction

This learning outcome provides skills and knowledge required for the development of prequalification of suppliers, market price survey, procurement bids and procurement contracts as per standard operating procedures and organization's policy.

## **Definition of key terms**

**Bid:** Complete proposal (submitted in competition with other bidders) to execute specified job(s) within prescribed time and not exceeding a proposed amount.

**Contract:** This is a written agreement of the authority for the acquisition of goods or services of any kind.

**Specifications:** Refers to a description of the characteristics of a commodity, work or service required or desired.

**Negotiation:** These are discussions between the procurement manager and the supplier at reaching an agreement.

**Bidder:** A person or organization making a formal offer for something.

## **Content/procedures/methods/illustrations**

### **2.1 Develop pre-qualification of suppliers as per standard operating procedures**

#### **Legal framework for public procurement**

Public procurement is the management of goods work and services on behalf of a public authority. It normally covers all public's works services and supply contract entered into by a public authority. Public procurement in Kenya is governed by Public and Asset Disposal Act 2015. The National Treasury is responsible for public procurement and asset disposal policy formulation.

#### **Key features of procurement in public sector**

##### **1. Contract documents**

These are the information base for a tender that a contracting entity provides to suppliers prior to procurement. Contract documents contain at least:

- a) Requirements for the suppliers.
- b) Ground for evaluation.
- c) Requirement specifications.
- d) Commercial conditions to be applied during the period of agreement.
- e) Administrative provision for the procurement.

##### **2. Publication of a contract notice**

The choice of procedure for publication of a contract notice is determined by the estimated value of the contract and type of contracting authority.

##### **3. Communication**

Main role is that, both requests to participate and tenders must be submitted in writing.

##### **4. Information on award decision**

A procuring entity shall notify the candidates in writing as soon as possible regarding the decision made to award a contract.

##### **5. Information of the request of a supplier**

The procuring entity is on request obliged to provide the rejected tender information about the reasons for rejection.

## **6. Documentation**

A procuring entity shall document the reasons for this decision and other significant events during the procurement procedure

These documents include:

- a) Contract notice
- b) Contract documents
- c) Distribution list
- d) Records of opening
- e) Evaluation records
- f) Reasons for rejecting requests and tenders

## **7. Transparency and secrecy**

After the award decision has been made on all tenders published, all documents relating to procurement are subject to the ordinary rules on public access to documents and confidentiality.

## **Legal framework**

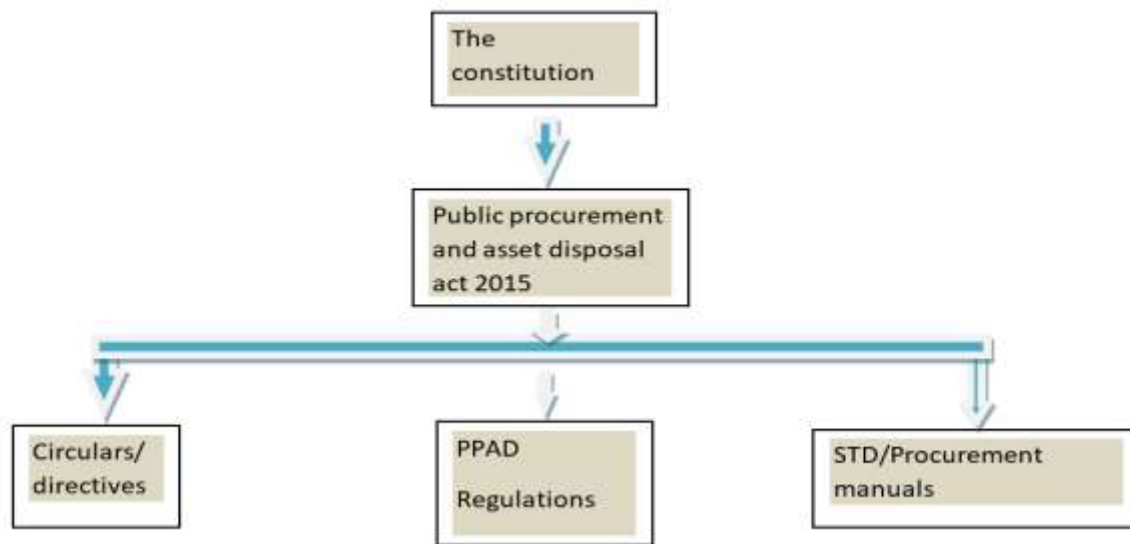
The legal framework for public procurement includes:

- a. Public Procurement and Disposal Act 2005.
- b. Public Procurement and Disposal Regulations 2006.
- c. Public Procurement and Disposal Regulations 2009.
- d. Supplies Practitioner Management Act 2007.
- e. National case –law

Adherence to public procurement procedures is critical to ensure that there is no mismanagement of public funds. Sound enforcement mechanism must be there to ensure that procuring entities comply with regulations. The Public Procurement Oversight Authority (PPOA) has the following functions:

- a. Ensure that procurement procedures established under the Act and the subsequent Regulations are complied with.
- b. Monitoring and reporting on the overall functioning of the public procurement system.
- c. Assisting in the implementation and operation of the public procurement system.

Decisions of the national courts provide an interpretation of the requirements of the Act and Regulation and can establish precedents that must be observed. The Legal Framework is constantly evolving through new or amended legislations. All procuring entities should therefore ensure that their procurement staff constantly keeps abreast of developments in the legal framework and further equipped to meet their legal obligations.



**Figure 3: Legal Process**

## **2.1 Develop specifications based on organization policy and laid down regulations**

### **Specifications**

It refers to a description of the characteristics of a commodity, work or service required or desired. It defines what the procurer wants to buy and consequently what supplier is required or desired. They can be simple or complex depending on the need.

### **Characteristics of a good specification**

- a. States the requirements clearly concisely and logically in functional and performance terms.
- b. Does not contain features that discriminate against supplier.
- c. Form the fundamental basis of the contract.
- d. For goods state what the item will be used for.
- e. Provide equal opportunity for all potential suppliers.
- f. Should be realistic.
- g. Contains sufficient information.

### **Use of Specification**

- a. Encourage open competition, invite maximum reasonable competition.
- b. Provide for quality control.
- c. Specifications are public records.
- d. Are used during the evaluation of bids for responsiveness.

## **Sources of Specification**

1. End-user: Information on function and performance of requested products use their expertise knowledge.
2. Industry product information: Can be found in their brochures, catalogues etc.
3. Professional societies: May offer information on standards and test applicable.
4. Consulting with experts.
5. Other government entities.

## **Types of specifications**

### **a. Functional specification**

They define the functions, duties and roles of the goods or services. It nominates what the goods are required to do.

### **b. Performance specification**

Defines the purpose of the goods services or works contracts, setting out the characteristics of goods or work to be procured such as quality, performance and safety.

### **c. Technical specification**

These are tendering requirements that apply to the goods or works to be produced such as quality performance and safety.

## **Process of Specification Development**

### **1. Planning and analysis**

Define the requirements and then approach the industry to see what is available to meet the department needs

### **2. Consultation and information gathering**

Consultations are vital for developing specifications information and advice relating to the requirement can be obtained from other departments and educational institutions.

### **3. Writing the specification**

Use simple clear language to minimize misinterpretations, be concise, and adopt a user-friendly format, number sections and paragraphs.

### **4. Vetting the specification and obtain approvals**

Ask a colleague who is unfamiliar with requirement to critique it from a potential supplier view.

### **5. Issuing the specification**

Should be included as part of the invitation offer.

### **6. Making amendments to the specification**

Should a need arise to amend the specification during the invitation to offer process, the amendment should be authorized by the project manager

## **7. Revising and storing of the specification**

### **2.2 Conduct a market price survey as per standards operating procedures**

#### **Make or buy decisions**

This is the art of making a strategic decision between producing an item internally or buying it externally from an outside supplier, also referred to as outsourcing.

These decisions normally arise when a firm that has developed a product or part is having trouble with the current supplier or has diminishing capacity or changing demand.

Make or buy analysis is conducted at the strategic and operational level.

#### **Factors that influence make decisions**

- a. Cost considerations (less expensive to make the part)
- b. Desire to integrate plant operation
- c. Productive use of excessive plant
- d. Better quality control
- e. In case of design secrecy
- f. Unreliable supplier
- g. Desire to maintain a stable workforce
- h. Control of lead time

#### **Factors that influence buy decisions**

- a. Cost consideration (cheap to buy)
- b. Lack of expertise
- c. Small volume requirement
- d. Desire to maintain a multiple source policy
- e. Procurement and inventory considerations
- f. Items not essential to the firm's strategy

## Relationship between cost to make and cost to buy

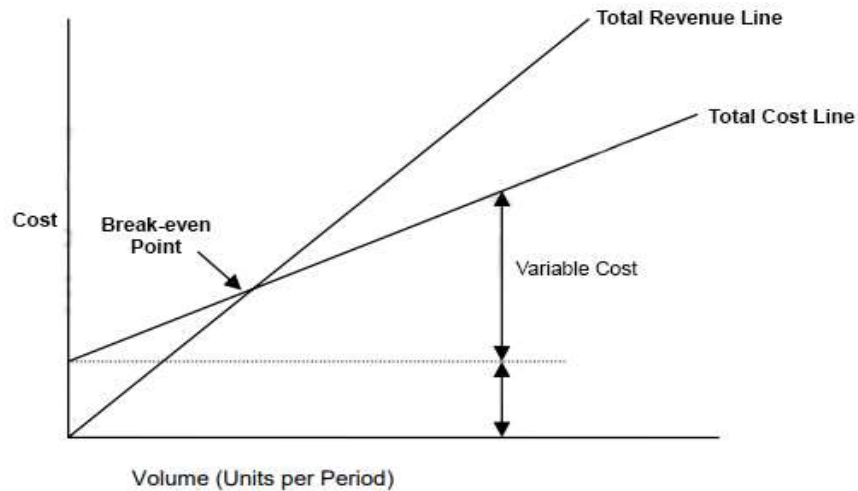


Figure: Break-even Analysis

Figure 4: Relationship between cost to make and cost to buy

### 2.3 Invite procurement bids (request for quotations, tender, request for proposals, expression of interests) based on requirement of organization.

#### Procurement bids

Types and methods of procurement

**Public Procurement:** This is acquiring of goods works and services on behalf of a public authority. It normally covers all public work services and supply contracts entered into by a public authority.

**Private procurement:** This is the process of acquiring goods and services or works to satisfy the needs of a particular private entity. Their main focus is to emphasize the profitability.

**Third Sector:** Used to describe the range of organizations that are either public or private. It includes voluntary or community organizations such as self-help groups and community group.

#### Methods of procurement

##### 1. Open tendering

It is short hand for competitive bidding. It allows companies to bid on goods in an open competition. In open tendering, tenders are advertised locally, have unbiased specification, have objective measures are open to all qualified bidders and are normally granted to the least cost provider.

## **2. Restricted tendering**

This method only places a limit on the amount of request for tenders that can be sent by a supplier or service provider. It is also referred to as selective tendering. It is considered a competitive procurement method. However, the competition is limited to agencies that are invited by the procuring team.

## **3. Request for proposal**

It is a method used when supplier or services providers are proposing their goods or service to a procurement team for review.

## **4. Two stage tendering**

The first stage requires a bidder to submit a technical proposal that highlights their solutions to fulfilling the requirements as specified by the procuring departments. The second procedure is like the one above. However, instead of the bidder submitting a fully completed technical proposal, a partial proposal is submitted.

## **5. Request for quotation**

This method is used for small valued goods or services. It is the least complex procurement method available. It is a fast method with less paper work.

## **6. Single Source**

Is a non-competitive method that should be used under specific circumstances. It occurs when the procuring entity intends to acquire goods or services from a sole provider.

## **2.4 Subject procurement bids to various levels of evaluation (qualification, technical, financial) as per standard operating procedures**

### **Bid evaluation**

This is the organized process of examining and comparing bids to select the best offer in an effort to acquire goods, work and services necessary to achieve the goals of an organization. The best offer recommended as a result of bid evaluation is referred to as the lowest responsive evaluated bid (most economically advantageous tender). The Bid evaluation committee are in charge of the bid evaluation process.

### **Qualification evaluation**

This evaluation should be conducted to determine whether tenders are complete and comply with the basic instructions and requirements of the tender document

This includes;

- Eligibility of the tender.
- All bids are from eligible sources.
- Bid has been submitted in correct format.

### **Technical evaluation**

This is done by comparing each bid to the technical requirements of the description of goods, work or services in the bidding document so as to determine the responsiveness of bids. Tenders must conform to specification, standards, drawings etc. Any material deviations should result in rejection of the bid and such bids should not be subject to financial evaluation and comparison.

### **Financial evaluation**

Upon completion of technical evaluation of tenders, the evaluation committee shall then conduct a financial evaluation and comparison. This will be to determine the lowest evaluated price from among the technically qualified bidders. The evaluated price for each bid shall be determined by:

- Taking bid price, as read out of the bid opening.
- Correcting any arithmetic errors in accordance with the methodology stated in the bidding document.
- Correcting all bids to a single currency.

## **2.6 Award procurement bids to the most responsive bidder based on evaluation reports and negotiations (On terms and conditions)**

### **Sourcing information**

#### **a) Primary data**

Field research that can use one or more approaches such as observation, analysis of internal records such as sales trends, trade missions to supplier's operations and questionnaires.

#### **b) Secondary data**

Statistics and annual reports issued for supplier companies, trade journals provide recent updates to what is happening in the industry.

#### **c) Government sources**

For example, abstracts of statistics employment gazette business monitors.

#### **d) Non-governmental institution**

Including chamber of commerce, professional associations press reviews economic forecasts etc.

#### **e) Trade consultants**

Who provide information but they are very often costly

#### **f) Existing suppliers and customers**

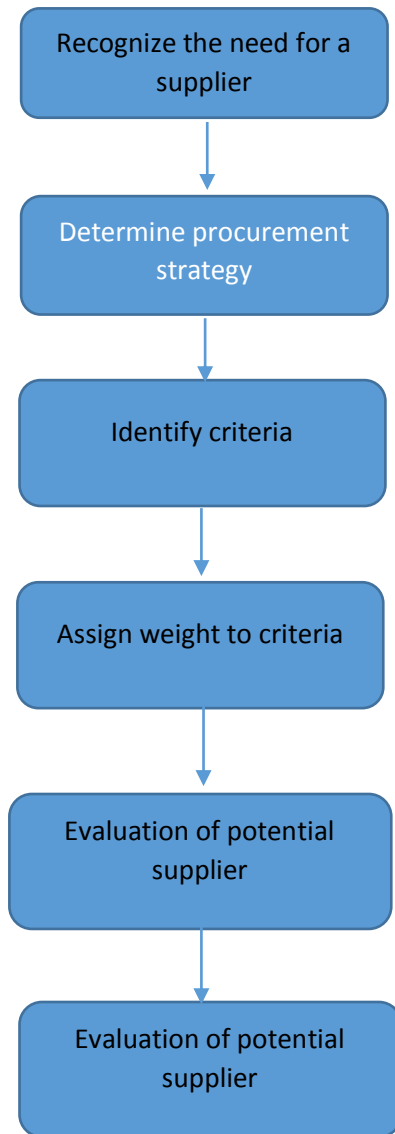
The suppliers can be an essential source of information. It is vital for suppliers and customers to maintain a good relationship.

## **Supplier Selection**

What you should look for in a supplier

- Reliability
- Quality-needs to be consistent
- Value for money-The lowest price is not always the best value for money
- Strong service and clear communication
- Financial security
- A partnership approach

## Supplier selection process



*Figure 5: Supplier Evaluation*

### Supplier Evaluation

The criteria of assessing the stability of a potential supply (10Cs):

- Competency
- Capacity
- Commitment
- Control
- Cash
- Cost
- Consistency
- Culture

- Clean
- Communication

## **2.6 Develop procurement contracts between the organization and the award bidders based on agreement as per standard operating procedures**

### **Awarding bid contracts**

The contract consists of mandatory standard clauses that will apply to the future contract. The general conditions of contract cover ordinary contract issues such as:

- i) **Delivery:** This is the processes that will be used for transporting the goods to the location at the agreed and specified time.
- ii) **Payments:** The contracts clearly show the modes of payment applicable during the bidding process.
- iii) **Termination:** These are terms that may cause a contract to come to an end.
- iv) **Force majeure:** These are the unforeseeable circumstances that prevent someone from fulfilling a contract.
- v) **Governing language:** The language to use in the bidding process.
- vi) **Notices**

They provide modifying clauses for the contract specific to the procurement action. This section supplements or modifies standard clauses in the general conditions of contract. Special conditions such as;

- Regulatory compliance issues
- Pre-shipment inspection and testing.

## **2.8 Sign procurement contract as per standard operating procedures**

### **Managing procurement contracts**

Contract management is the process of managing contract creation, execution and analysis to maximize the operational and financial performance of an organization, while reducing financial risk.

A contract file shall be opened after the procurement contract is signed and shall be opened by the contract manager. The file contains:

1. Signed original procurement contract.
2. Any signed modifications of the contract
3. Contract correspondence between the two parties
4. Information of performance
5. Correspondence of the contract
6. Management progress reports
7. Minutes of meetings of the project team

8. Payment records and close up documents
9. Copy of performance security (where required)
10. Any other relevant information

In large procurement contracts, the contract management should provide for review meetings. A review meeting report must include;

- a) Executive summary
- b) Report on the performance of activities
- c) Other relevant issues such as performance rating.

The review should contain the following

1. Timelines of contract performance
2. Cost and quality performance
3. Risk analysis
4. Organizational and operational effectiveness
5. Appropriateness of the procedures
6. Suppliers performance

## **2.9 Manage the contract by both parties as per contract agreement**

### **Payments to contractors**

It is essential for the contractor to perform the contract satisfactorily. Similarly, it is important for the procuring entity to make payments to the contractor, timely and in accordance to the contract requirements.

Payments should not be made unless the invoice or the fee note is accurate and be submitted in accordance with the provisions of the contract. Failure to pay the contractors on time by procuring entities for previous projects leads to the pending bills to accumulate to unacceptable amounts, thus giving it a bad name in public.

### **Conclusion**

This learning outcome covered market price survey, evaluate procurement bids and develop procurement contracts.

## Further Reading



Guidance notes on the prequalification of tenderers. EBRD manual: download from [https://www.ebrd.com/downloads/procurement/project/PQ\\_Guidance\\_Notes\\_FINAL.pdf](https://www.ebrd.com/downloads/procurement/project/PQ_Guidance_Notes_FINAL.pdf)

### 2.3.3.3 Self-Assessment



#### Written assessment

1. Which one of the following is not a type of procurement method?
  - a) Open tendering
  - b) Restricted tendering
  - c) Private tendering
  - d) Request of proposal
2. The following are some of the type of procurement. Which one is not
  - a) Public
  - b) Private
  - c) Open
  - d) Third sector
3. Specifications involve three types. Which one of them is not among them?
  - a) Practical specification
  - b) Functional specification
  - c) Technical specification
  - d) Performance specification
4. The following are some of the conditions necessary for a contract. Which one among them is not a necessity?
  - a) Notices
  - b) Payments
  - c) Cheque
  - d) Governing language
5. Define the term specification
6. Give examples of procurement bids
7. List the levels of evaluation involved in a procurement bid
8. Describe the process of negotiation
9. List the types of procurement

### **Oral Assessment**

1. Describe the legal framework for public procurement
2. Discuss reasons why an organization may opt to buy instead of make
3. Describe the supplier evaluation process
4. Describe the process of negotiation

### **Practical Assessment**

1. Mrs. Wandeto the CEO of Xyz Company wants to choose some suppliers to aid in the procuring of commodities in her company. Describe the best ways which will help her to select the appropriate supplier
2. A need arises in ABC organization regarding the use of woven carrier bags. Using the make or buy decision, discuss the best method the company would opt for

#### **2.3.3.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classrooms and classroom resources
- The constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample Procurement Documents (Goods received note, Delivery notes, Stock control cards and Counter issue voucher among others)
- Sample Case Studies on Procurement, 2009

#### **2.3.3.5 References**

- Benton WC (2007), Purchasing and supply management, Pv7 Publisher New Delhi
- Hashemi, S. H., Karimi, A., & Tavana, M. (2015). An integrated green supplier selection approach with analytic network process and improved Grey relational analysis. *International Journal of Production Economics*, 159, 178-191.
- Kumar, D. T., Palaniappan, M., Kannan, D., & Shankar, K. M. (2014). Analyzing the CSR issues behind the supplier selection process using ISM approach. *Resources, Conservation and Recycling*, 92, 268-278.

### 2.3.4 Learning Outcome No 3: Take charge of the procured goods

#### 2.3.4.1 Learning Activities

| Learning Outcome No 3: Take charge of the procured goods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
|  Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Special Instructions                                |
| <ul style="list-style-type: none"><li>3.1. Inspect and accept or reject procured supplies based on specifications as per SOPs</li><li>3.2. Verify and forward delivery documents (delivery notes, goods' receipts, invoice, duplicated LSO and LPO) for payment as per standard operating procedures</li><li>3.3. Receive goods based on delivery documents as per standard operating procedures</li><li>3.4. Record procured goods in respective ledger cards as per standard operating procedures</li><li>3.5. Store goods based on their respective storage conditions or dispatch to the user departments as per standard operating procedures</li><li>3.6. Follow up payment as per the organizations' policy</li></ul> | Do a role play on inspection of producers supplies? |

#### 2.3.4.2 Information Sheet No2/LO3: Take charge of the procured goods



##### Introduction

This learning outcome will provide relevant skills and knowledge applied in the verification of delivery documents, recording procured goods in the ledger cards and storage of the goods as per standard operating procedures.

##### Definition of key terms

**Ledger:** Is a sub ledger in which purchases are recorded

**Invoice** commercial document or bill presented to a buyer by a seller or service provider for payment within a stated time frame that indicates what has been purchased, in what amount and for what price

**Receipt:** A written acknowledgement of having received or taken into ones' possession certain products for a specified amount of money

**Standard Operating Procedures:** set of a step by step instructions compiled by an organization to help workers carry out complex routine operations

**Local Purchase Order:** This is a document created by the buyer and sent to the seller to purchase a product.

### **Content/procedures/methods/illustrations**

#### **3.1. Inspect and accept or reject procured supplies based on specifications as per SOPs**

##### **Procedure for receiving procured goods**

Receiving is the act of taking possession of goods services or works in order to stage them for inspection or place them into inventory.

Inspection is the act of examining goods that have been delivered to determine their conformance to what was ordered via the bid document.

Acceptance is the legal act of documenting that the goods, works or services conform to the requirement of the bid document terms and conditions

Inspection and acceptance of goods services and works is the final step of the procurement cycle. The procuring entity must be able to ensure that contracts have been enforced and that the deliveries correspond to the contract terms with respect to

- i) Timing
- ii) Standards and specifications
- iii) Quantitative
- iv) Place
- v) Price, value and cost

##### **Inspection and acceptance committee**

The inspection and acceptance committee is established by an accounting officer of a procuring entity. The committee is composed of a chairperson and at least two other members appointed by the accounting officer or head of procuring entity

After delivery of goods, the committee:

- a. Inspects the goods received and test where necessary
- b. Inspects and reviews the goods works and services against the terms and specifications to check for conformance
- c. Accepts or rejects goods services and works on behalf of the procuring entity
- d. Checks for quantity received
- e. Ensures that the goods work and services meet the technical standard defined in the contract
- f. Ensures delivery timelessness or notes any delay
- g. Ensures that all required deliverables have been submitted
- h. Ensures that all required manuals or documentation have been received

- i. Issues interim certificate or goods received note as appropriate and in accordance with the contract

### **3.2 Verify and forward delivery documents (delivery notes, goods' receipts, invoice, duplicated LSO and LPO) for payment as per standard operating procedures**

#### **Delivery documents**

##### **1. Delivery note**

This is a document accompanying a shipment of goods that lists the description and quantity of the goods delivered. A copy of the delivery note, signed by the buyer or consignee, is returned to the seller or consignor as proof of delivery.

##### **2. Good receipts**

This is an official document issued by a port, shed warehouse or shipping terminal operator to acknowledge receipt of items listed in it under customary or specific terms and conditions

##### **3. Invoice**

It is a non-negotiable commercial instrument issued by a seller to a buyer.

It identifies both the trading parties and list, describes and quantifies the items sold and shows the date of shipment and mode of transport prices and discounts (if any) delivery and payment terms.

##### **4. Local purchase order**

Is a commercial document and first official offer issued by a buyer to seller indicating types, quantities and agreed prices for products or services?

##### **5. Local service order**

Is a document sent to the seller by the buyer giving details of the ordered products or services? The listing contains the current stats of each order, as well, as the pre-ordering local interconnection requirements often in downloadable format.

### **3.3 Receive goods based on delivery documents as per standard operating procedures**

#### **Process of receiving inspection and acceptance**

##### **Receiving**

The receiving staff should consider the following

- Is it for this department?
- Is it damaged?
- Is quantity correct?
- Timelessness?
- Have terms been met?

The receiving package should contain the following documentation;

- a) The invoice or packing slip
- b) The receiving copy of the bid document
- c) A completed good, service, or works received report

### **3.4 Record procured goods in respective ledger cards as per standard operating procedures**

**Inspection:** Upon acknowledging receipt of goods, the inspection and acceptance committee must conduct an inspection for the following minimum conditions:

- a. Verify conformance of what was ordered to bid documents
- b. Verify quantity ordered against quantity delivered
- c. Check the functionality
- d. Confirm instructions regarding special handling
- e. Verify that the unit of measurement count is correct
- f. Inspect the damage /breakage
- g. Verify that the delivery documentation is acceptable
- h. Verify that packaging integrity is preserved
- i. Verify that perishable items are in good condition

Inspection should be completed within a reasonable amount of time

#### **Acceptance testing**

This is the act of testing what is procured either all items or the first item delivered or by random selection

Departments, which need additional acceptance criteria over and above what is stated within the provision must describe the acceptance criteria in the bid document.

Acceptance testing period may occur over a period of time and that span of time must be documented within the competitive solicitation

### **3.5 Store goods based on their respective storage conditions or dispatch to the user departments as per standard operating procedures**

#### **Warehousing /storage of goods**

Storage is the holding of goods under proper conditions to ensure quality and safety until time of use. Inventory is a list of goods and materials held available in the stock

#### **Objectives of inventory records**

1. Provision of accurate information of supplies in stock
2. Determination of purchasing needs
3. Provision of data for goods cost control
4. Prevention of theft and pilferage

#### **Responsibilities of the head of procuring unit with respect to store**

1. Ensure an officer is appointed to be in charge of stores
2. Arrange for occasional visits of inspection to the stores
3. Ensure that there is no overstocking
4. Ensure stores do not suffer deterioration

5. Ensure safety measures are taken in stores

#### **Responsibility of the head of stores officer**

1. ensure stores are clean and properly ventilated
2. Inspect the stores regularly for any loss damage or leakage
3. Report half-yearly in writing to the head of procuring unit of any obsolete or unserviceable store
4. Examine frequently the locks of doors and fastening windows
5. Apply goods storage and preservation practices for all stores items
6. Highly flammable or expensive stock are kept in a separate store room
7. Restricted access to stores

#### **Storage process of inventory**

##### **Step1: Recurring and inspection**

Documentation for inventories starts with receiving the order that is signed when it is first delivered. Personnel in charge of receiving checks for accurate quantity and usability

##### **Step 2: Storage**

All products have optimal storage conditions that must be met to sustain usability. Ensure that every item in inventory are in a safe environment for long term storage. Design efficient storage zones or related products with similar needs items in storage areas should be visible and tunable.

##### **Step 3: Rotation (if applicable)**

Keep inventory on a steady rotation to reduce spoilage and waste. Clearly label all perishable items with dates that correspond to their creation and estimated expiration.

Staff should always take the items from those that are closest to expiration.

##### **Step 4 schedule**

Set a schedule of regular counts and checks up to keep a close record of your fluctuating inventory. Regular checks of inventories will give your insight into the regular flow of the product through your storage.

##### **Step 5 security**

A major source of inventory disciplinary action is employee and customer theft. Evaluate the safety of your inventory storage and consider improving your systems to reduce loss.

### **3.6 Follow up payments as per organization policy**

#### **Payment as per organization's policy**

The procedure to pay process is the coordinated and integrated action taken to fulfill a requirement for goods or services in a timely manner and at a reasonable price.

## **The procedure to pay process flow.**

### **Step 1. Identify needs.**

Determine and define the business requirements with the help of cross-functional stakeholders. Once a valid need is identified, procurement team sketches out high-level specifications for goods and terms of reference and statements of work.

### **Step 2. Create requisitions**

After finalizing specifications, a formal purchase requisition is created. Requisitions can be created for and type of procurement from standard purchases to subcontracts and consignments.

### **Step 3. Purchase requisition approval**

Purchase requisitions are then reviewed by department heads or procurement officers. It can either be approved or rejected after evaluation.

### **Step 4. Create a spot buy.**

If the requested goods/products have characteristics such as unmanaged category buys, one time unique purchases, or low value commodities, then a spot buy can be performed.

### **Step 5. Purchase order approval**

Purchase orders are now sent to ensure legitimacy, accuracy of specification. Approved purchase orders are then dispatched to vendors. Vendors can either approve, reject or start a negotiation.

### **STEP 6. Good receipt**

Once the supplier delivers the promised goods/services the buyer inspects the delivered products or services to ensure that it complies with the contract terms. The goods receipt is accepted or rejected based on standards specified in the purchasing contract.

### **Step 7. Supplier performance**

The supplier performance is evaluated. Factors like equality, on time delivery service, contract compliance, responsiveness and total cost ownership are checked

### **Step 8. Invoice approval**

Once a good receipt is approved, a three-way match between the purchase order, the vendor invoice and the goods receipt is performed.

If there are no disparities found, the invoice is approved and forwarded to the finance team for payment.

### **Step 9. Vendor payment**

Upon receiving an approved invoice, the finance team will process payments according to the contract terms. Any contract changes will be taken into account. A payment made to a supplier will fall into one of the following five types;

- Advance
- Partial
- Final
- Retention payments
- Installment

### **Best practices in the procure to pay process**

1. Implementation procure to pay software
2. Keep the process transparent
3. Improve supplier engagement
4. Optimize inventory
5. Streamline contract management

### **Conclusion**

This learning outcome covered inspection on procured supplies, verify delivery documents, record procured goods in respective ledger cards and follow up payments.

### **Further Reading**



Procedures Manual for the Procurement of Goods and Services, (2017). Retrieve from <http://www.iica.int/sites>

### **2.3.4.3 Self-Assessment**



#### **Written assessment**

1. Which one of the following is not a role of the head of stores officer?
  - a) Ensure stores are clean
  - b) Writing half yearly reports
  - c) Ensure access to stores is restricted
  - d) Appointing store staff

2. Which term best describes the statement, set of step by step instructions compiled by an organization to help workers carry out operations
  - a) Local purchase order
  - b) Standard operating orders
  - c) Invoice
  - d) Standard operating procedures
3. Receiving is the act of examining goods that have been delivered to determine conformance
  - a) True
  - b) False
4. Deliveries made most correspond to the following
  - a) Documentation
  - b) Quantities
  - c) Place
  - d) Timing
5. What is the meaning of acceptance testing?
6. Describe the procedure for receiving procured goods
7. Explain the responsibility of the store's manager

#### **Oral Assessment**

1. What are the roles of head of procuring?
2. Describe the storage process of inventory

#### **Practical Assessment**

1. Mr. Patel is the head of procurement department of xyz; he realizes that some inventory is missing from the store while doing regular inspection. What action must he take?
2. The inspection committee of ABC Company is preparing to receive inventory from the supplier, describe the steps involved in the receiving, inspection and acceptance of the goods

#### **2.3.4.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classrooms and classroom resources
- The constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual

- Sample Procurement Documents (Goods received note, Delivery notes, Stock control cards and Counter issue voucher among others)
- Sample Case Studies on Procurement, 2009

#### **2.3.4.5 References**

- Atieh, A. M., Kaylani, H., Al-abdallat, Y., Qaderi, A., Ghoul, L., Jaradat, L., & Hdairis, I. (2016). Performance improvement of inventory management system processes by an automated warehouse management system. *Procedia Cirp*, 41, 568-572.
- Benton WC (2007), Purchasing and supply management, Pv7 Publisher New Delhi
- Panteleev, V., Kizim, A., Kamaev, V., & Shabalina, O. (2014, September). Developing a model of multi-agent system of a process of a tech inspection and equipment repair. In Joint Conference on Knowledge-Based Software Engineering (pp. 457-465). Springer, Cham.
- Sudhi S. (2005) Sourcing strategy policy and designs pvt publishers, New Delhi

### 2.3.5 Learning Outcome No 4: Issue procured goods

#### 2.3.5.1 Learning Activities

| Learning Outcome No 4: Issue procured goods                                                                                                                                                               |                     |                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|
|                                                                                                                          | Learning Activities | Special Instructions |
| 4.1. Receive and verify approved requisitions for goods as per workplace policy<br>4.2. Record issued goods systematically as per workplace policy<br>4.3. Sign for issued goods as per workplace policy. |                     |                      |

#### 2.3.5.2 Information Sheet No2/LO4: Issue procured goods



##### Introduction

This learning outcome will provide the knowledge and skills essential for verifying approved requisitions for goods, systematic recording of issued goods and signing of issued goods in accordance to the workplace policy.

##### Definition of key terms

**Policy:** These are roles established on how the procurement process should be conducted. Specific to the organization.

**Requisition:** Document generated by a user department or store room personnel to notify the purchasing department of items it needs to order their quantity and time frame.

**Approve:** A formal approval framework that specifies the authorization process for procurement.

**Verify:** This is to make sure or to demonstrate that the inventory being issued is accurate.

##### Content/procedures/methods/illustrations

#### 4.1 Receive and verify approved requisitions for goods as per workplace policy

##### Principles of issuing procured goods

Inventory is usually issued from a warehouse when it is required in the production activities. Issues refers to the behavior of taking stored inventory from the store when need arises. They can be an actual issue or automatic issue.

**Table 3 Sample of an issue slip**

| Requisition and issue slip Bureau of internal revenue agency |                          |                      |          |         |
|--------------------------------------------------------------|--------------------------|----------------------|----------|---------|
| Division office                                              | Responsibility<br>Centre | Ris. No.<br>Sai. No. | Date     |         |
| Stock No.                                                    | Unit                     | Description          | Quantity | Remarks |
| Requisition                                                  |                          |                      |          |         |

| Stock No.                                 | Unit          | Description | Quantity | Quantity | Remarks        |
|-------------------------------------------|---------------|-------------|----------|----------|----------------|
|                                           |               |             |          |          |                |
| Purpose                                   |               |             |          |          |                |
| Signature:<br>Name<br>Designation<br>Date | Requested by: |             |          |          | Received<br>by |

## 4.2 Record issued goods systematically as per workplace policy

### Process of issuing inventory

#### Step 1: Requisitioning

All requests, for issuance, of goods from stock shall be covered by the requisition and issue voucher (RIV) from which is the official document designed for this purpose. The entire request for issuance of requirement shall be made by the user departments and approved by the authority concerned. Justification for the need must be clearly established.

#### Step 2: Verification of requisition by procurement officer

Based on the identified need in the requisition of requirement, the stores that are in charge will verify the requisition to ensure that it has been authorized by the relevant head of department and that the requisition has been properly completed.

#### Step 3: Issuance of products in the line with first in first out (FIFO) principle

All the issuance procedures must as far as practicable observe the first in and out principle. The products with shorter life must also be issued first ahead of those with longer shelf life even if this violates the FIFO principle to reduce chances of expiries of products while still in the store.

**Step 4: Collection of issued items from the store**

Once the order picking is completed, requisition will be notified to collect the items from the issuing officer. It is of paramount importance that the collecting official provides proof of collection authorization from the head of department.

**Step 5: Adjusting stock records**

After issuance, the transactions will be entered in the inventory records and the balances reduced accurately and promptly.

**Methods of issuing stock**

There are a number of stock issuing methods. They include:

**i) First-in-first-out method (FIFO)**

It is one of the main methods of issuing stock. This method assumes that inventory purchased or manufactured first is sold first and newer inventory remains unsold. The cost of order inventory is assigned to cost of goods sold and that of newer inventory is assigned to ending inventory.

**Advantages of FIFO**

- It is simple to understand and easy to use
- It is applicable when the price is falling
- It is useful in case of less transaction and price of materials are fixed
- It is logical because first received goods are first issued

**Disadvantages of FIFO**

- It is unsuitable in case the price is rising
- It is complex if many lots are purchased during the period at different prices
- This method increases the chances of clerical error
- It is very hard to determine the value of returned item.

**ii) Last in first out method**

Under these method goods issued are valued at price paid for the latest lot of the goods. Stock of goods on hand will be valued at a price paid for earliest entering last in stores is consumed first.

**Advantages of LIFO**

- This method is simple
- It is applicable in case of a risk in market place
- The valuation of stock has no role in profit or loss
- In case of rising price this method is more suitable

### **Disadvantages of LIFO method**

- This method is practically not better
- In case of a price in material is increasing. It is not applicable
- For determining the price, more than one price has often to adopt.
- This method can lead to clerical error because every time price has been changed

### **iii) Imprest method**

With the imprest method, the quantity to be ordered is the quantity necessary to restore the stock on hand to a pre-agreed fixed quality

This imprest stock take must be carried out on a regular fixed frequency (daily, weekly, fortnightly, monthly)

### **iv) Replacement issue**

In most of engineering industries, a large number of workshop machines are used. So, there will be considerable requirement of tools and gauges. When a fresh issue has to be made, the machine shop operator may be asked to return the old ones to the stores and obtain a new one for replacement. This is done without issue notes and the storekeeper has to maintain proper records of such replacement.

### **v) Issue per schedule**

In a batch production unit, sometime the requisition for issue of stores is sent well ahead indicating when i.e. the time and date is required.

### **vi) Issue on request**

This is the most orthodox way of issue wherein the indenting department normally sends a man and collects material from stores.

### **vii) Loan issue**

The issue of stores on loan should, as far as possible be discouraged. Situations often arise where some amount of spare, electrical fitting, etc. Are required on emergency basis due to some breakdowns.

### **viii) Stock records**

In a store house where thousands of transactions take place, some amount of records are maintained. This makes it possible for the storekeeper to make an entry of all transactions.

#### **4.3 Sign for issued goods as per workplace policy**

##### **Documents for issuing inventory**

- **Materials requisition note**  
Materials can only be issued to production departments against the materials requisition. In this document, most records not only indicate the quality of goods issued, but also the cost center or the job number for which the requisition is being made.
- **Materials returned note**  
This is used to record any chosen materials, which are returned to stores.
- **Materials transfer note**  
This document is used to transfer materials from one production department to another. They are also used to update the stores' records.

##### **Importance of effective issuing**

- Improves accuracy of inventory orders
- Creates a more organized warehouse
- Helps save time and money
- Keeps customers coming back for more
- Increased productivity and efficiency

##### **Objectives of inventories records**

1. Provision of accurate information of goods and supplies in stock
2. Determination of purchasing needs
3. Provision of data for good costs control
4. Prevention of theft and pilferage
5. Preventing wastage and loss
6. Continuing utilization of supplies
7. Obtaining a fair return of value upon disposal of supplies

##### **Responsibilities of the head of stores officer**

1. Ensure storerooms are kept clean
2. Inspect the store regularly for any loss, damage or leakage and report to the head of procuring unit.
3. Provide half yearly report
4. Examine frequently the locks of the door and windows
5. Apply goods storage and preservation practices
6. All stock of highly inflammable or expensive nature are kept in a separate room
7. Ensure issues are made from old consignments of stores before issuing new consignments
8. Ensure notices prohibiting smoking are prominently prohibited exhibited.

9. Ensure access to stores is restricted.

### Conclusion

This learning outcome covered proper verification of approved requisition of goods and systematic recording and signing of issued goods.

### Further Reading



Read more on receiving issuing and storage of procured goods form <https://www.pearsonhighered.com>

### 2.3.5.3 Self-Assessment



#### Written assessment

1. Which one of the following is not a method of issuing stock?
  - a) Last in last out
  - b) First in first out
  - c) Imprest issues
  - d) Replacement issue
2. Which one is NOT a document used in issuing stock
  - a) Quotation
  - b) Material requisition note
  - c) Material returned note
  - d) Material transfer note
3. Which of these terms best describes rules established on how the procurement process should be conducted
  - a) Requisition
  - b) Policy
  - c) Verification
4. Which one of the following is NOT a factor to consider when receiving goods?
  - a) Product code
  - b) Serial number
  - c) Price
  - d) Description
5. Explain the meaning of the term issuing of stock

6. State 3 documents used in issuing of documents
7. Explain the procedure for issuing of stock

#### **Oral assessment**

1. What is the process of issuing inventory?
2. What are the importance of effective issuing stock?
3. What are the importance of effective issuing?

#### **Practical assessment**

1. Mr. Kim has been appointed by the procurement manager to be in charge of the store. What roles and responsibilities must he demonstrate as the head of store
2. Demonstrate stock level management of an organization of your choice
3. Clearly describe the methods of issuing stock.

#### **2.3.5.4 Tools, Equipment, Supplies and Materials**

- Computers
- Classrooms and classroom resources
- The constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample Procurement Documents (Goods received note, Delivery notes, Stock control cards and Counter issue voucher among others)
- Sample Case Studies on Procurement, 2009

#### **2.3.5.5 References**

- Atieh, A. M., Kaylani, H., Al-abdallat, Y., Qaderi, A., Ghoul, L., Jaradat, L., & Hdairis, I. (2016). Performance improvement of inventory management system processes by an automated warehouse management system. *Procedia Cirp*, 41, 568-572.
- Larry p. (2004). *Sourcing solution*, Routledge London Elizabeth a 2007 guide to global sourcing, prentice Hal Chicago.
- Yang, T., Kuo, Y., Su, C. T., & Hou, C. L. (2015). Lean production system design for fishing net manufacturing using lean principles and simulation optimization. *Journal of Manufacturing Systems*, 34, 66-73.

## **CHAPTER 3: WAREHOUSING OF PROCURED GOODS/OVERSEER WAREHOUSING OF PROCURED GOODS**

### **3.1 Introduction**

Warehousing of procured goods is a unit of competency for TVET level 6 qualification. The unit specifies the competencies required to oversee warehousing of procured goods. It involves designing/laying out a store/warehouse, maintaining layouts of goods in the store, records of stored goods, quality of stored goods, optimum stock levels and securing stored goods. Warehousing offers security stocking-meaning that the procured goods are accessible for transportation, at whatever points organizations put in their orders. For this case putting a warehouse makes a lot of sense since the procured goods will be safe from harm and robbery.

The critical aspects of competency to be covered includes designing/laying out warehouse/store appropriately, demonstrating knowledge of warehouse design and layout, considering good storage requirements in their classification. It also includes arranging stored goods based on their categorization, maintaining stores cleanliness and tidiness, demonstrating knowledge of storage pests control, observing FIFO and LIFO principles in the issuance of stored goods, securing stored goods, demonstrating knowledge of legal requirements related to warehousing. Also, in the critical aspect are demonstrating knowledge of understanding relationship between storage space and stock level, regular stock taking and updating stock control records and risk assessment and mitigation. The basic resources required include computers, stationery, classroom and classroom resources, the Constitution of Kenya 2010 among others. The unit covers six learning outcomes. Each of the learning outcomes cover: learning activities, that cover performance criteria statements. Records maintenance talks about types of store ledgers, stock utilization and data recording. The competency may be assessed through written test, demonstration, practical assignment, interview/oral questionnaires and case study. Self-assessment is also provided at the end of each learning outcome. Holistic assessment with other relevant units is recommended.

### **3.2 Performance Standard**

Oversee warehousing of procured goods by designing or laying out a store warehouse, maintaining the layout of goods in the store, records of stored goods, quality of stored goods, optimum stock levels and securing stored goods in accordance with standard operating procedures and workplace policy.

### **3.3 Learning Outcomes**

#### **3.3.1 List of learning outcomes**

- a) Design/layout a store/warehouse
- b) Maintain layout of goods in the store
- c) Maintain record of stored goods
- d) Maintain quality of stored goods
- e) Maintain optimum stock levels
- f) Secure stored goods

### 3.3.2 Learning Outcome No 1: Design/layout a store/warehouse

#### 3.3.2.1 Learning Activities

| Learning Outcome No 1: Design/layout a store/warehouse                            |                                                                                                                                                            |                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                        | Special Instructions                                                                                                                                                                                                                                          |
|                                                                                   | 1.1 Design warehouse/store based on nature of goods to be handled and available space<br>1.2 Lay out warehouse/store based on nature of goods to be Handle | <ul style="list-style-type: none"><li>• Visit a warehouse and train trainees on goods arrangement</li><li>• Trainees to handle goods arrangement in groups</li><li>• Trainees to discuss in groups factors to consider in laying a proper warehouse</li></ul> |

#### 3.3.2.2 Information Sheet No3/LO1: Design/layout a store/warehouse

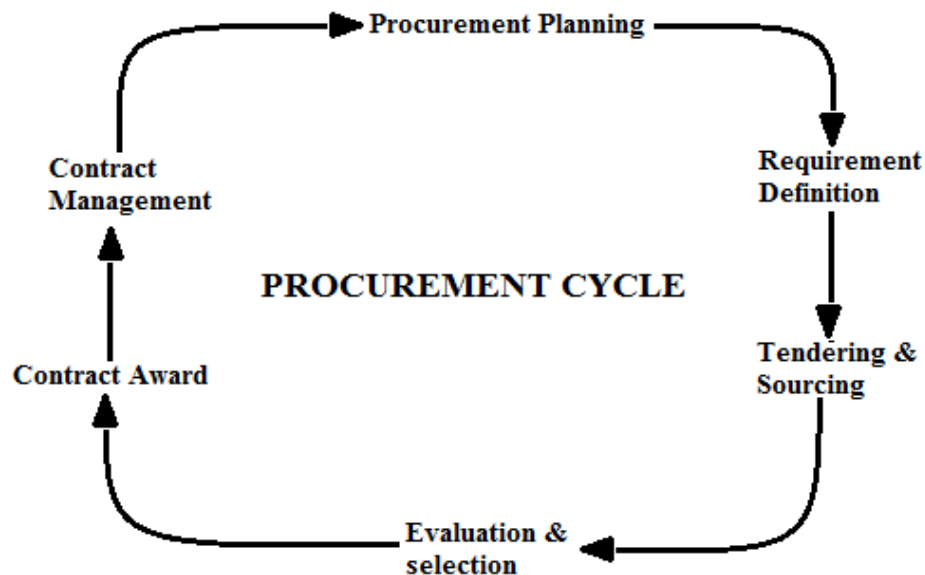


##### Introduction

This learning outcome will equip the trainees with skills, competencies, knowledge and behavior to design and layout a warehouse/store based on the nature of goods to be handled. Trainees will be trained on the various natures of procurement goods, types of warehouse store designs space requirement for goods and occupational safety and health procedures to be considered while warehousing. This will ensure that the trainee is able to design a warehouse effectively.

##### Definition of key terms

**Procurement:** This is the process of acquiring the right goods and services at optimal prices. It is the act of obtaining or buying goods and services. According to Wikipedia, procurement is the process of agreeing to terms and acquiring goods and services or works from an external source. This is often done through tendering or a competitive bidding process. It is critical to note that individual businesses set procurement policies that govern and streamline the whole procurement cycle.



**Figure 6: procurement cycle**

**Warehouse:** This is a room or place where goods or merchandise are kept as they await sales, shipment or transportation. It is a large building used to store goods prior to distribution. Warehouse can also be defined as the place for hoarding goods awaiting distribution

**Warehouse design/layout:** This is a map that shows how a warehouse will look like and how goods will be stored. It is important to note that the goal of warehouse designing is to optimize the functionality of the warehouse operations and achieve maximum efficiency. The warehouse layout assists to maximize the utility of space and foster effectiveness in the operations

### **Content/procedures/methods/illustrations**

#### **1.1 Warehouse/store is designed based on nature of goods to be handled and available space.**

##### **Designing of warehouse/store**

Designing a warehouse or store is an activity undertaken to ensure that the outline of a store is made to foster efficiency. The design or layout is dependent on the nature of goods to be stored, duration of storage and location. A proper warehouse design /layout is vital to avoid capacity issues, delivery procedures inconsistencies, and inadequate storage. This is important because it assists to maximize on the available space.

### **Factors to consider while preparing a warehouse/store design**

- Nature of business. This means that specific types of business will require unique ways of designing of the layout.
- Distance from the Market-This will ensure quick accessibility to the needed destination of the goods
- Availability of transport. This will be important because it will ensure that goods get to the desired destination on time
- Availability of communication infrastructure
- Type/nature of goods to be stored
- Operational processes
- Volumes inbound and outbound transaction
- Storage types
- In-house operations which may include put away and pull sequence
- Processing requirements before distribution. e.g. packing, kitting among
- Others

### **Features of a good store layout**

- Warehouse signage of the name and logo should be well displayed without a lot of information on it. This is meant to foster visibility
- Ensure mannequins are appropriate to the target market and display the latest trends. This is critical to create awareness on the nature of goods that are kept in the specific warehouse
- Trial dressing rooms should be clean and have mirrors
- Merchandise should be well arranged to avoid tripping off customers and employees
- The appropriate materials should be used for the floor to avoid accidents e.g slippery materials should be avoided.
- The layout should be in a way that it minimizes theft and shoplifting
- The warehouse should have adequate lighting
- Exit and entrance should be well outlined to avoid confusion
- Sample warehouse layout

### **1.2 Warehouse/store is laid out based on nature of goods to be handled**

#### **Types of warehouse /store design**

##### **1. Grid Layout**

This is a type of store layout which counters and fixtures are placed in long rows or runs usually at right angles throughout the store

##### **Advantages**

- Low cost
- Customer familiarity
- Merchandise exposure

- Ease of cleaning
- Simplified security
- Allows possibility of self service

### **Disadvantages**

- Plain and uninteresting
- Limited browsing
- Limited creativity in décor
- Stimulated of rushed shopping behavior
- Grid layout is very simple. The aisles of the store are arranged parallel to one another and lead to the checkout lanes at the front of the store where customers enter and exit. This type of warehouse layout is commonly used in grocery and drugs store.

## **2. Diagonal layout**

This layout is simple. The merchandise in the store is separated into aisles, which lead to check out area. Diagonal layout although similar to grid layout, here the aisles are set at an angle to the front entrance of the store. It is used to maximize the space available in a smaller store.



**Figure 7: Diagonal designed warehouse**

## **3. Mouse trap layout**

This is a common design layout used in storage of furniture. The mouse trap design is in such a way that when customers enter the store, there is only one direction to go. Customers walk around the perimeter of the store, stopping to pick up items they need until they reach the checkout aisle located at the original place of entrance.

This layout is considered more traditional than and not as attractive as other modern ones

#### **4. Mixed floor plan**

This type of layout incorporates different types of layout throughout the store. This is often seen in department store setting where different floor plans work better depending on the type of merchandise on display in that particular area.

It is used for stores that contain different types of cargo such as clothes house wares etc. In an instance that clothes and house wares are in the same warehouse, grid layout can be used for house warehouse goods and racetrack layout for clothes.

This type of a layout is advantageous by enabling customers to find what they are looking for easily and quickly.

#### **5. Spine layout**

This is a type of layout where a single main aisle runs from the front to the back of the store, allowing customers access to both directions of the warehouse. In this layout, merchandise are arranged on either sides of the spine using free-flow or grid pattern which branch off towards the back aisle walls.

This type of layout is useful in providing customer with an overall view of the store environment at one glance thus stimulating them to purchase the goods while shopping.

#### **6. Loop layout**

It is also known as race track layout. This is a type of store layout in which major customer aisles begin at the entrance, loops through the store usually in the shape of a circle, square or triangle and then returns to the front of the store.

#### **7. Free flow layout**

This type of layout allows free movement of customers in the store. This type is applicable in a spacious warehouse. Fixtures and merchandise are grouped into a free-flowing pattern. Products are arranged throughout the store using shelves and racks. This arrangement allows employee's access to customers immediately and free movement of customers.

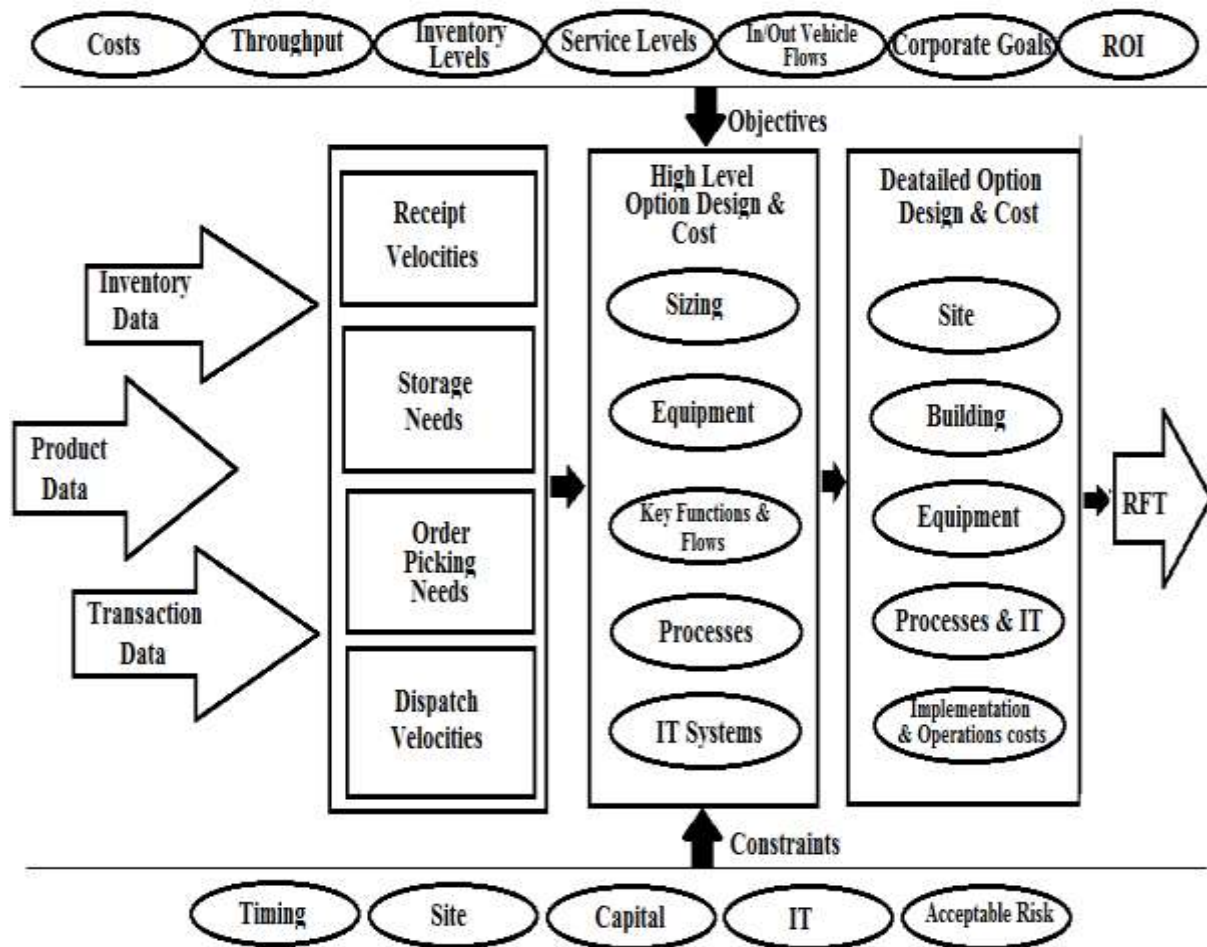
#### **Advantages**

- Allowance for browsing and wandering freely
- Increased impulse purchase
- Enhances flexibility and visual appeal

#### **Disadvantages**

- Costly
- A lot of space wastage
- Encourages loitering and shoplifting
- Difficulty in cleaning

Below illustrated is a sample of a warehouse layout /design



**Figure 8: Warehouse layout**

### Procedures of safety in warehousing

These are safety precautions and procedures that must be ensured and observed in the designing of the warehouse layout. This is based on the realization of the fact that warehouses are one of the most dangerous places to work, hence safety procedures have to be ensured.

When designing a warehouse layout various aspects of occupational safety and health procedures should be clearly indicated. These procedures must be in line with the best practices. Key among the best practices include:

- Schedule regular warehouse best practice trainings
- Keep the warehouse clean at all times
- Use signage to communicate warehouse safety rules
- Check and double click all safety equipment in the warehouse.

- Indicate location /position of emergency exits
- Put special instructions on risky areas, such as “slippery floor” “wear helmet” “mind your head”.
- Indicate restricted areas for easy identification in case of emergencies

## Conclusion

In this learning outcome covered design and layout warehouse/store based on nature of goods to be handled. It has also discussed the various types of warehouses and best practices of the safety procedures in the warehouse.

## Further Reading



Search on [https://images .app.goo.gl/AY7AnyfGGibrET17](https://images.app.goo.gl/AY7AnyfGGibrET17) to see more types of warehouses for your familiarization

### 3.3.2.3 Self-Assessment



#### Multiple Choice questions

1. To reduce time between production and consumption of goods one should practice \_\_\_\_
  - a) Distribution
  - b) Warehousing
  - c) Promotion
  - d) Trade offs
2. \_\_\_\_ Is the use of space horizontally and vertically?
  - a) Accessibility
  - b) Cube utilization
  - c) Stock location
  - d) Pallet positioning
3. Which is the best layout for fast moving items in a warehouse?
  - a) Loop layout
  - b) Spine layout
  - c) Diagonal layout
  - d) Mouse trap layout
4. \_\_\_\_ Layout is organized in such a way that counters and fixtures are placed in a long row and at a right angle.
5. Describe factors to be considered while designing a warehouse

6. What is the importance of preparing a warehouse layout?
7. Outline features of a good warehouse

### **Oral Assessment**

1. Please explain some of the layouts used in warehousing
2. State two considerations for choosing a particular warehouse design

### **Practical Assessment**

You have been consulted to design a warehouse layout for a store that will be storing clothing and house ware. Perform the following tasks

- Select the most appropriate layout you will use
- Provide reasons for selecting the particular layout
- Draw the layout showing components like exit, entrance, safety precision areas

#### **3.3.2.4 Tools, Equipment, Supplies and Materials**

- computers
- stationary
- classroom and classroom resources
- the constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample procurement Documents
- Sample case studies on procurement, 2009

#### **3.3.2.5 References**

De Koster, R., Le Duc, T. and Rodbergen, K. J. (2007) Design and control of warehouse order packing. *Literature review journal of operational Research* 182(2) 481-501

Fayol Henri (2013) transacted reprint, General and Industrial Management.

Horta, M., Coelho, F., & Relvas, S. (2016). Layout design modelling for a real world just-in-time warehouse. *Computers & Industrial Engineering*, 101, 1-9.

### 3.3.3 Learning Outcome No 2: Maintain layout of goods in the store

#### 3.3.3.1 Learning Activities

| Learning Outcome No 2: Maintain layout of goods in the store                      |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                        | Special Instructions                                                                                                                                                                                             |
|                                                                                   | 2.1 Classify goods based on their value, perishability, activity based, flammability, strength<br>2.2 Arrange goods in the store based on their categorization<br>2.3 Maintain stores cleanliness and tidiness in accordance with workplace policy<br>2.4 Identify and use appropriately required storage and materials handling equipment | •Simulate on storage of flammable goods<br>•Draw an illustration showing the various categorizations of goods in a warehouse<br>Coach trainees when storing goods and pick out key procedures that are important |

#### 3.3.3.2 Information Sheet No3/LO2: Maintain layout of goods in the store



##### Introduction

This learning outcome will train on skills, competencies, knowledge and behavior that will enable him to classify, categorize and maintain tidiness of procured goods. It will ensure that the trainee is able to categorize goods in the store depending on the nature. It will also aim at identifying the storage materials needed when handling the equipment.

##### Definition of key terms

**Classification:** it is the systematic arrangement of items in groups according to established criteria

**Categorization:** it is the act of sorting and organizing goods according to group's classes similarities in the warehouse

**Tidiness:** The state of quality of arranging goods in the store

**Flammability:** it is the ease with which an equipment or good can catch or cause fire

**Perish ability:** it is the possibility of goods decreasing in value or quality overtime

## **Content/procedures/methods/illustrations**

### **2.1 Classifications of goods**

When storing goods in the warehouse, a special consideration is given to the classification. This is because different goods that are stored have different values in terms of returns to the business. If you need to move goods in and out of the store, it is essential that they are classified. The purchasing and store department are the critical departments who should provide consistent and clear classification of goods.

#### **Importance of classifying goods in the store**

- i) Helpful in grouping of store items: Items falling under a particular category can be stored at one place, which ensures optimum utilization of storage space.
- ii) Easy location: users of the warehouse can easily find at the materials whenever they require and this will save time in the retrieval of the goods.
- iii) Proper accounting: Record-keeping process of properly classified items in the store is simplified. Simplified record keeping ensures accuracy in posting the receipts and gaps in the store records. This will foster effective accountability of all items in the warehouse. In addition, it will assist to monitor the viability of the business.
- iv) Avoidance of duplication: classification helps in avoiding the chances of duplicating same items of material
- v) Proper care: classification helps to store manages to supervise and control procured goods.

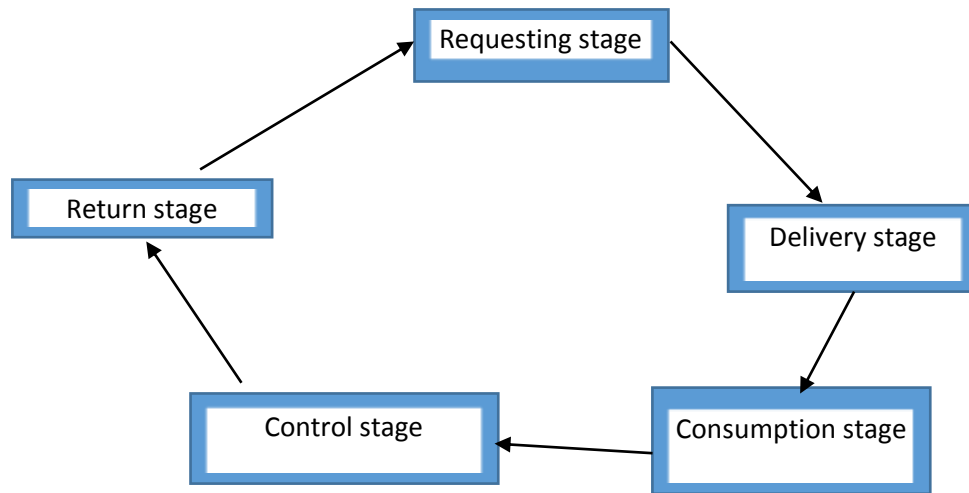
#### **Basis of classification**

##### **Classification of goods in a warehouse is based on:**

- i) Nature: Here the goods are classified into direct and indirect materials
- ii) Value goods are classified into category A, B, C where category A constitute costly items calling for greater control compared to B and C
- iii) Store movement: first moving, slower moving and dormant stock. First moving goods get exhausted early because they have high consumption rate compared to slow moving and dormant stock

## 2.2 storage of goods

It is universally accepted that warehouse plays an importance role in the storage of procured good. Warehousing provides one with a space to store finished goods



**Figure 9: Warehouse Storage Process**

**Requesting stage:** this is the stage where an order is placed to get an item from the store. At this stage, the requester fills the stock release form. Then the storekeeper receives and uses it to removes items from the store. The requester signs against the number of items received.

**Delivery stage:** This is a stage where goods are delivered to the requester. The number of items and the date is captured in the delivery note.

**Control stage:** this is the stage where the management put in measures to safeguard the goods from losses. It entails establishing mechanisms to reduce unacceptable losses of goods e.g. generating incidence reports

**Returns stage:** This is the stage the goods will be returned back to the store after being used

**Consumption stage:** this is the stage the good are being used

## 2.3 Arrangements of goods in warehouse layouts

Goods should be arranged such that different types of goods and materials can be stored in distinct areas. The location of the materials should be appropriately numbered to help the warehouse user identify materials easily.

### Importance of arrangements of goods in the store

- i) Correct knowledge of which particular is located where
- ii) The items are easily accessible for the warehouse
- iii) Reduce damage and spoilage of items in the store
- iv) Optimum utilization of warehouse space

v) Easy movements of goods with the warehouse

### **Procedure of arranging items in the store**

**Assess demand of goods:** identify those items that are mostly used. These items should be placed in a location where they are easily accessible.

**Map and label all goods:** all the categories of the goods should be labeled or marked. The label will act as a reference when someone is looking for an item.

**Inventory management programs:** these are systems that scan materials and detect the details of goods. All the details of the items should be recorded and fed into the system. The details include the name, size, and price of the goods. Once the details are fed into the system, the system will detect the details when the customers are buying the products. The system will also record the number of items bought and those that are remaining, and these indicate when to order the items.

## **2.4 Storage hygiene**

Maintaining good hygiene in the warehouse is vital as it ensures order and tidiness; it also ensures health and safety in the warehouse.

### **Guidelines of hygiene storage**

- Keep storage space clean: This includes sweeping the floor, removing garbage and dust to ensure easy utilization of the warehouse.
- Clean warehouse when empty: makes sure to clean the warehouse after removing all items on the floor of the warehouse.
- Use Dettol to spray the warehouse to chase away insects.
- Inspect the store regularly to check whether it is clean enough.
- Check the expiring date of the goods and make sure you have a plan of disposing of obsolete goods.

## **2.5 Stacking methods**

This is the method of arranging items in the warehouse. There are various stacking methods as shown below:

- Blocking stacking
- Stacking frames
- Single-deep pallet racks
- Double deep rack
- Drive-in rack
- Pallet flow rack
- Push back rack

- a) **Block stacking:** This refers to a type of unit goods stacked on top of each other and placed the warehouse floor in lanes or blocks. The items are stacked based on the same conditions such as height of the warehouse space weight of the load and capacity of the warehouse.
- b) **Stacking frame:** here, decks and posts are erected in pallets that can be conveniently moved in and out of the store.
- c) **Single deep pallet rack:** This method is stacked in such a way that it provides access to each of the pallets. This is convenient when the pallet is removed; the space will be ready available when a new pallet is placed.
- d) **Double deep pallet stack:** The double deep method incorporates two single racks that are connected together.
- e) **Drive-in rack:** This method has drive-in lanes and spaces which provide access when stacking.
- f) **Parallel flow rack:** The pallet flow rack is suitable where the load is moved from one end of the rack on a conveyer that allows the items to be removed in first in first out manner.
- g) **Push back rack:** This is a last in first out method where the load is placed into the warehouse using a rail-guided carrier.

## 2.6 Storage and handling equipments

It is important to handle brittle items carefully to reduce their chances of damage. Goods should also be removed from the warehouse on temporary basis. If you are unable to point out the custom duty of your goods at all times, you can still store them together in common storage. However, the common storage manner only applies to items that share the same eight-digit commodity of, same quality and same technical features

### Conclusion

In conclusion, this learning outcome imparts learners with skills, knowledge and behavior to classify, categorize and maintain tidiness of procured goods. It has further outlined the warehouse storage process in addition to basis of classification

### Further Reading



**Read further on stacking methods**

### **3.3.3.3 Self-Assessment**

#### **Written questions**

1. Which one of the following is the definition of classification?
  - a) Systematically arrangement of goods into the group
  - b) Diving goods on based perishability
  - c) Quality arranging of goods
2. Which of the following does not fit good classification requirement?
  - a) Value
  - b) Perish ability
  - c) Tidiness
3. Which of the following is a base of good classification?
  - a) Nature
  - b) Flexibility
  - c) Value
4. Which of the following does not relate to maintain layout of goods in the store?
  - a) Distribution of goods to various outlets
  - b) Classification of procured goods
  - c) Storage hygiene
5. Which of the following is importance of arranging goods in the store?
  - a) Easily accessibility
  - b) Increase cost of the industry
  - c) Demotivates employer
6. What is the meaning of a warehouse?
7. Define classification
8. State 2 importance of arranging goods in the store
9. Explain briefly what tidiness clean
10. What is the consequence of storing perishable goods for a long period of time?

#### **Oral assessment**

1. Which criteria can be used when classifying goods?
2. What are the procedures of arranging items in the store?

#### **Practical assessment**

1. Assume you are a store keeper how will you maintain tidiness and cleanliness in the store
2. Assume you are a store keeper how will you arrange goods systematically in the store
3. An organization has the habit of storing goods in one designated area and go through difficult when looking how will you help them enhance accessibility of items in the store

#### **3.3.3.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationary
- Classroom and classroom resources
- The constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample procurement Documents
- Sample case studies on procurement, 2009

#### **3.3.3.5 References**

Kłodawski, M., Marianna J., Konrad, L., & Mariusz, W. (2017). The issues of selection warehouse process strategies. *Procedia Engineering*, 187(1), 451-457.

Shahab, D., Jeffrey, S., & Gue, K. (2016). Optimising space utilisation in block stacking warehouses. *International Journal of Production Research*, 55(21), 6436-6452.

### 3.3.4 Learning Outcome No 3: Maintain records of stored goods

#### 3.3.4.1 Learning Activities

| Learning Outcome No 3: Maintain records of stored goods                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Learning Activities                                                                                                                                                                                                                                                                                  | Special Instructions                                                                                                                                                                                    |
| 1.1 Record procured goods in respective store ledgers as per standards operating procedures<br>1.2 Prepare registers for the ledgers as per standards operating procedures<br>1.3 File delivery documents (copy of contract agreement, copy of LPO, copy of invoice, copy of delivery note, copy of inspection report, copy of payment voucher) as per standards operating procedures. | <ul style="list-style-type: none"><li>• Provide sample store ledgers for the trainees to have a view.</li><li>• In groups prepare a file of documents that demonstrate the delivery documents</li></ul> |

#### 3.3.4.2 Information Sheet No3/LO3: Maintain records of stored goods



##### Introduction

This learning outcome is expected to impart to the trainee skills, knowledge, behavior and ability to record, prepare registers and file delivery documents of procured goods. It will expose the trainee to the various types of delivery documents in addition to outlining the inventory recording methods.

##### Definition of key terms

**Ledger:** It is also called a book of final entry. It is a book in which business activities are recorded i.e. business transactions like receipts and issues. The ledger records classified and summarized financial information from journals as debits and credits and show their current balances.

**Procedures:** This is an established and a standard way of doing things. Every operation has its own procedures as stipulated by a certain set of standards. In this case, the maintenance of records of stored goods is carried out in a particular official way or procedure.

**Delivery:** This is the movement of goods and services from the manufacturer to the warehouse and from the warehouse to various given destinations like the retail shops or to the final consumers or customers.

**Standard operating procedure:** These are written step by step instructions that describe how to perform a particular routine activity. There are given standards of operating procedures in every warehouse on how to maintain records of stored goods.

### **Content/procedures/methods/illustrations**

#### **1.1 Procured goods are recorded in respective stores ledgers as per standards operating procedures**

A store ledger is a record of materials used in production. It also defined as manual or computer record of the raw materials and production supplies stored in a production facility. It records items purchased as an increase to the inventory and items used in production as a decrease to inventory. It shows availability of the inventory material at any given time. The store ledger works greatly as an internal control system and ensures that nothing is left unrecorded in inventory. This document is kept outside the store department as it is the document of costing department.

Store ledger is also known as a stock ledger. It comprises of an account for each item in the stock that keeps the record of:

- a) Quantity of goods that are procured
- b) Type of goods procured
- c) Rate
- d) Amount

#### **Importance of store ledger**

This is an important accounting department that has several functions. These include:

- It is used to keep track of all issue transactions concerning materials. This is done through entries made in respective columns for various transactions.
- Recording of additional information for quantity on order and reversed can also be done.
- It is used to maintain an effective accounting system
- It is used by auditors to determine how the organization inventory record compare to its hands on quantities
- It is used by purchasing staff to determine when and in what quantities to purchase additional inventory items.
- It is used by the accounting staff, as the basis for calculating the ending cost of inventory on hand
- It is used to keep track of all issues of transaction concerning materials

## A sample of a store ledger as an illustration

**STORES LEDGER**

Name of the Article..... Minimum Qty. ....

Symbol .....Unit.....

Maximum Qty. ....

Bin No. .... Previous Year's

Bin Card No. .... Consumption.....

Period of Delivery.....

| ORDERED  |                  |               | Date | Reference | QUANTITY |       |         | AMOUNT  |    |       |    |         |    | Rate | Remarks |
|----------|------------------|---------------|------|-----------|----------|-------|---------|---------|----|-------|----|---------|----|------|---------|
| Quantity | Order No. & Date | Date Received |      |           | Receipt  | Issue | Balance | Receipt |    | Issue |    | Balance |    |      |         |
|          |                  |               |      |           |          |       |         | ₹.      | P. | ₹.    | P. | ₹.      | P. |      |         |
|          |                  |               |      |           |          |       |         |         |    |       |    |         |    |      |         |
| RESERVED |                  |               |      |           |          |       |         |         |    |       |    |         |    |      |         |
| Quantity | Job No.          | Date Issued   |      |           |          |       |         |         |    |       |    |         |    |      |         |
|          |                  |               |      |           |          |       |         |         |    |       |    |         |    |      |         |

**Figure 10: Store ledger sample**

### Stock or inventory recording

It is a manual or computer based record of the quantity and kind of inventory at hand, committed to firm orders or work in progress. Inventory record contains information about the type and amount of stock an entity possesses. It is concerned with keeping a track of physical quantities and the complete monetary valuation inventories sold and in hand. It helps in recording the goods as and when they reach the warehouse or go down, and when it is issued for the purpose of sale.

### Inventory Recording Methods

**There are several inventory methods and these include:**

i) The periodic method

The stock account in the general ledger would not updated regularly with the movement of inventory throughout the whole financial period until the last closing day of the financial period in which the inventory balance would be determined and adjusted accordingly. It is an accounting method where you determine the amount of inventory at the end of each accounting period. Examples are illustrated below:

**When goods are purchased from supplier**

| Account Name     | Debit | Credit |
|------------------|-------|--------|
| Purchases        | XXXX  |        |
| Accounts payable |       | XXXX   |

**Figure 11: Purchases**

**When expenses are incurred to obtain goods for sale**

| Account Name | Debit | Credit |
|--------------|-------|--------|
| Freight-in   | XXXX  |        |
| Insurance    | XXXX  |        |
| Cash/Bank    |       | XXXX   |

**Figure 12: Expenses**

**When goods are returned to supplier**

| Account Name                     | Debit | Credit |
|----------------------------------|-------|--------|
| Accounts payable                 | XXXX  |        |
| Purchases returns and allowances |       | XXXX   |

**Figure 13: Returned goods**

**When payment is made to supplier**

| Account Name     | Debit | Credit |
|------------------|-------|--------|
| Accounts payable | XXXX  |        |
| Cash/Bank        |       | XXXX   |

**Figure 14: Supplier Payment**

#### When goods are sold to customers

| Account Name        | Debit | Credit |
|---------------------|-------|--------|
| Accounts receivable | XXXX  |        |
| Sales               |       | XXXX   |

Figure 15: Sold goods

#### When goods are returned by customers

| Account Name        | Debit | Credit |
|---------------------|-------|--------|
| Cash                | XXXX  |        |
| Accounts receivable |       | XXXX   |

Figure 16: Returned goods by customers

#### At the end of the period

| Account Name                          | Debit | Credit |
|---------------------------------------|-------|--------|
| Inventory (Ending inventory)          | XXXX  |        |
| Cost of goods sold (Balancing figure) | XXXX  |        |
| Purchases                             |       | XXXX   |
| Inventory (Beginning inventory)       |       | XXXX   |

Figure 17: End of period

#### ii) Two bin system

All the units for a particular product would be held in two bins. This **two-bin inventory** control is a system used to determine when items or materials used in production should be replenished. It also involves the storage of goods in two bins, one of which contains working stock and the other containing reserve stock. The amount of inventory kept in the reserve stock bin equals the amount the company expects to use during the ordering lead time associated with that item.

#### Types of stock records

##### a) Material Requisition note

It is an authorization to the shopkeeper to issue raw materials, finished parts or other items of the store

b) Material issue note

A document prepared by the store department containing the details of materials issued, materials requisition name, value of goods issued and signature of persons receiving the materials.

c) Materials return note

Materials supplied to a job maybe in excess or defective. In this case, the materials will be returned to the store s with a material return note.

d) A store ledger

It is a manual or computer record of raw materials and production supplies stores in a production facility

e) Stock record card

It is used to record the stock movement, annual consumption and record the orders placed

**3.3 Delivery documents (copy of contract agreement, copy of LPO, copy of invoice, copy of delivery note, copy of inspection report, copy of payment voucher) are filed as per standards operating procedures**

**Types of delivery document**

**Shipping Documents**

**1. Original commercial invoice**

A document issued by the supplier to the buyer describing the details of the sale transaction. Details described in the shipping document include:

- Quantity
- Parties involved
- Tax information
- Price

**2. Packing list**

A document issued by the supplier to the buyer describing the details or the content of a package

Copies should also accompany the package to let the other relevant agencies know the contents the documents are dealing with

### **3. Original certificate of conformity**

These are the documents issued by the standard body i.e. bureau of standards through their agents to the supplier as evidence that goods meet minimum specifications or requirement It is used from the country of origin. It is also known as the original certificate of compliance

### **4. Insurance debit note**

All imports procured by Kenyan importers must be insured by companies licensed

### **5. Special Permit/certificates**

Some goods require special permits to be produced and delivered, hence permits must be obtained from relevant government agencies

### **6. Import declaration form**

It's a document issued by the KRA to the buyer for the purpose of clearing cargo. What is to be cleared?

- Value of the cargo for tax calculation
- Quality
- Quantity
- Classification (HS Code) harmonized system classification of goods

This document attracts a fee of 2.5% of the customs value of the goods subjected to a minimum of Ksh 5, 000

### **7. Importers declaration form(c52)**

It is issued by KRA to forward authority to assist clients in clearing goods to the country. It is issued free of charge compared to import declaration form.

### **8. Original Bill of Landing**

It's a document issued by the carrier to the supplier as a contract for the carriage using the train. It can also be used as evidence for transfer of ownership of goods.

## File delivery document

### Types of delivery documents

#### 1. Local Purchase order

This is a commercial document and first official offer issued by the buyer to the seller showing the products the buyer intends to purchase and the transactions that take place within the boundaries of a country.

| COMPANY NAME<br>COMPANY DETAILS |             | Purchase Order |            |       |
|---------------------------------|-------------|----------------|------------|-------|
|                                 |             | Date:          |            |       |
|                                 |             | PO #:          |            |       |
|                                 |             | Purchaser:     |            |       |
| Vendor:                         |             |                |            |       |
| Address:                        |             |                |            |       |
| Contact Person:                 |             |                |            |       |
| Contact Details:                |             |                |            |       |
| Federal Registration Number:    |             |                |            |       |
| ITEMS                           | DESCRIPTION | QTY            | UNIT PRICE | TOTAL |
|                                 |             |                |            |       |
|                                 |             |                |            |       |
|                                 |             |                |            |       |
|                                 |             |                |            |       |
|                                 |             |                |            |       |
|                                 |             |                |            |       |
| SHIPPING TERMS                  |             | Subtotal:      |            |       |
| MODE OF DELIVERY:               |             | Tax Rate:      |            |       |
|                                 |             | Others:        |            |       |
| OTHER SPECIAL INSTRUCTIONS:     |             | GRAND TOTAL:   |            |       |
|                                 |             |                |            |       |
| Prepared by:                    |             | Approved:      |            |       |
| Purchaser                       |             | Manager        |            |       |

Figure 18: Purchasing order form

#### 2. A contract agreement

These are binding agreements between the supplier and the buyer of a certain product or service on given or stated projects for a given stated period.

### 3. Copy of invoice

It's a document of trade or commercial document issued by the supplier to the buyer indicating the products quantity and agreed prices for products or service the supplier has provided.

### 4. Inspection Report

The original signed inspection checklist should be filled in the main office to be used as a basis warehouse oversight.

Inspection of the interior and exterior of a warehouse should be done regularly to verify the quality of the stored goods as well as the conditions of their storage

### 5. Copy of delivery note

It is also referred to as dispatch note or goods receipt. It is a document that lists all the goods included in the shipment and lists quantities, not values i.e. price of goods.

The copy of delivery note is returned to the seller as proof of delivery. It is made when a shipment is shipped from a company warehouse to the customer

Delivery Receipt

COMPANY NAME  
COMPANY DETAILS

Date: \_\_\_\_\_  
DR #: \_\_\_\_\_  
SO #: \_\_\_\_\_

Delivered to: \_\_\_\_\_  
Address: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Contact Details: \_\_\_\_\_

| ITEMS | DESCRIPTION | QTY | UNIT PRICE | TOTAL |
|-------|-------------|-----|------------|-------|
|       |             |     |            |       |
|       |             |     |            |       |
|       |             |     |            |       |
|       |             |     |            |       |
|       |             |     |            |       |

GRAND TOTAL: \_\_\_\_\_

Received by: \_\_\_\_\_

**Figure 19: Delivery receipt**

## 6. Copy of payment voucher

This is a document, which can be used as proof that a monetary transaction has occurred between two parties.

| COMPANY NAME<br>COMPANY DETAILS |           | Check Voucher |            |       |
|---------------------------------|-----------|---------------|------------|-------|
|                                 |           | Date:         |            |       |
|                                 |           | CV #:         |            |       |
|                                 |           | Check #:      |            |       |
| Payable to:                     |           |               |            |       |
| Address:                        |           |               |            |       |
| In the amount of:               |           |               |            |       |
| For:                            |           |               |            |       |
| ITEMS                           | REFERENCE | QTY           | UNIT PRICE | TOTAL |
|                                 |           |               |            |       |
|                                 |           |               |            |       |
|                                 |           |               |            |       |
|                                 |           |               |            |       |
|                                 |           |               |            |       |
|                                 |           |               |            |       |
| Accounting Entry:               |           |               |            |       |
| Debit:                          |           |               |            |       |
| Credit:                         |           |               |            |       |
| Check Voucher                   |           |               |            |       |
| Prepared by:                    |           | Checked by:   | Approved:  |       |
|                                 |           |               |            |       |

**Figure 20: Payment Voucher**

### Conclusion

This learning outcome has imparted to the trainee skills, competences, knowledge and behavior to be able to record, prepare registers and file delivery documents of procured goods. It has further discussed several types of inventory recording. Finally, it has addressed the different types of delivery documents and their samples.

### Further Reading



<https://www.jotform.com/form-templates/document-delivery-form>

<https://www.examples.com/business/delivery-note.html>

### 3.3.4.3 Self-Assessment



#### Written Assessment

1. A record must be maintained for each item in stock showing
  - a) The quantity on hand received
  - b) The quantity on hand received and issued
  - c) The quantity on hand and issued
  - d) The quantity received and issued
2. Matching the suppliers invoice, the purchase order, and the receiving report normally should be the responsibility of the-----
  - a) Warehouse receiving function
  - b) Purchasing function
  - c) General accounting function
  - d) Treasury function
3. For effective internal accounting control, employees maintaining the accounts receivable subsidiary ledger should not also approve
  - a) Employee overtime wages
  - b) Credit granted to customers
  - c) Write off customer account
  - d) Cash disbursements
4. Which of the following departments should have the responsibilities for authorizing payroll rates charges?
  - a) Personnel
  - b) Payroll
  - c) Treasurer
  - d) Time keeping
5. Which of the following control procedures may prevent the failure to bill customers for some shipment?
  - a) Each shipment should be supported by a renumbered sales invoice that is accounted for
  - b) Each sales order should be approved by authorized personnel
  - c) Sales journal entries should be reconciled to daily sales summary.
  - d) Each sales invoice should be supported by a shipping document.
6. To achieve a good internal accounting control, which departments should perform the activities of matching shipping documents with sales orders and preparing daily sales summaries
  - a) Billing
  - b) Shipping

- c) Credit
  - d) Sales order
7. Which of the following would be the most appropriate test to determine whether purchase orders are being processed on a timely basis
- a) Determine the dates of unpaid accounts payable invoices
  - b) Select a block of used purchase order numbers and account for all numbers in the block
  - c) Discuss processing procedures with operating personnel and observe actual processing of purchases
  - d) Compare dates of selected purchases orders with those of purchase requisition

#### **Oral Assessment**

1. What are some of the other documents used in a warehouse?
2. What is record management

#### **Practical Assessment**

1. As a store manager, you received purchased goods from a given order, and you are expected to prepare the register for the ledgers. What are the steps required to carry out the preparations?

#### **3.3.4.4 Tools, Equipment, Supplies and Materials**

- Computers
- stationary
- classroom and classroom resources
- the constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample procurement Documents
- Sample case studies on procurement, 2009

#### **3.3.4.5 References**

- De Koster, R., Le Duc, T., & Roodbergen, K. J (2007). Design and control of warehouse order packing: A literature review. *European journal of operational research*, 182(2), 481-501.
- Silver, E. A (1981). Operations Research in inventory Management: *A review and critique operations research*, 29(4), 628-645.

### 3.3.5 Learning Outcome No 4: Maintain quality of stored goods

#### 3.3.5.1 Learning Activities

| Learning Outcome No 4: Maintain quality of stored goods                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Special Instructions                                                                                                                                                                 |
|                                                                                   | <ul style="list-style-type: none"><li>1.1 Control storage pests (Rodents and Insects) based on infestation as per standard operating procedures</li><li>1.2 Store goods based on their (refrigeration, dry place, humidity, ventilation, darkness, lightness)</li><li>1.3 Utilize/issue stored goods based on weighted average and FIFO and LIFO principles</li><li>1.4 Secure stored goods from adulteration as per workplace policy</li><li>1.5 Maintain store goods as per (OSHA, Factories act, employment act, EMCA 1999, Public health Cap 242)</li></ul> | <ul style="list-style-type: none"><li>Check ventilation</li><li>Use catalogue with pin cards</li><li>Provide a sample of the employment act for the trainee to familiarize</li></ul> |

#### 3.3.5.2 Information Sheet No3/LO4: Maintain quality of stored goods



##### Introduction

This learning outcome will train on skills, knowledge and behavior to keep warehouse inventory more organized and in good quality by controlling storage pests for effective and efficient warehouse operations

##### Definition of key terms

**Standard operation procedures (sop)** these are set of step-by-step instructions made up by an organization to assist the employees to carry out their routine operations.

**FIFO-** This is a method used in managing inventory and financial matters in the warehouse. It stands for “first in first out” meaning that the oldest inventory is recorded as sold first.

**LIFO** -This is a method used in managing inventories and financial matters in the warehouse. It stands for last in first out meaning that the most recently produced are recorded as sold first.

**Adulteration** -This is the process of adding another chemical substance to a food item in order to alter its actual quality or quantity.

## Content/procedures/methods/illustrations

### 1.1 Storage pest

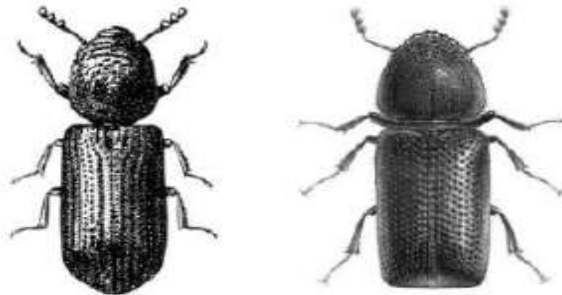
A storage pest is an insect or other animal that damages or destroys stored goods or any other stored valuable organic matter. The implication is that the warehouse must be well protected from the storage pests to enhance the safety of the valued items to ensure their utility.

#### Types of storage pests

They are divided into two primary storage pests and secondary storage pests

#### Primary storage pests

These are the pests that attack the grain when it is stable and intact and it has the ability to multiply quickly if the conditions are optimal. These pests are more destructive than the secondary pests in the long run. Some of the primary pests include:



Rhyzopertha dominica (left) and Prospephanus truncates (right)

Acanthoscelides obtectis



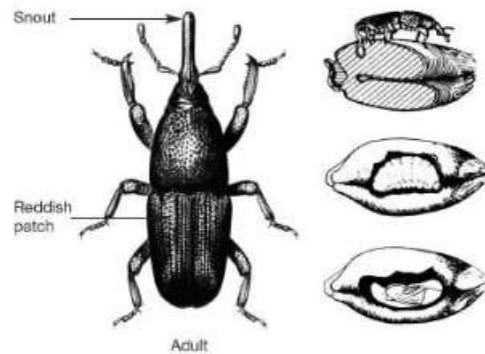


Callosobruchus spp



Zabrotes subfasciatus

### Sitophilus zeamais



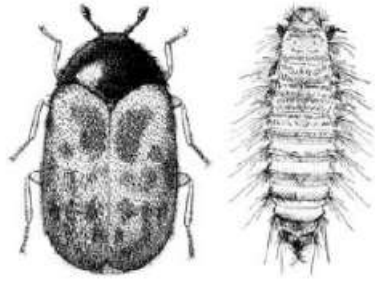
### **Secondary storage pests**

These pests are able to attack materials that have been previously damaged either by primary pests or by thrashing, handling or drying. They also attack processed commodities like rice and flour. Examples of secondary pests include:

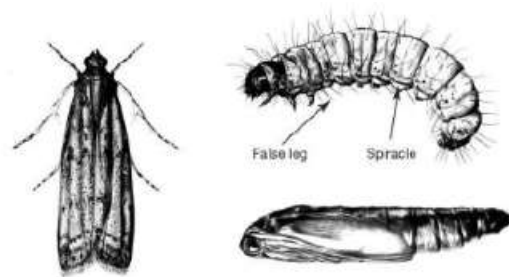
1. Rust red floor beetle
2. Long headed flour beetle
3. Saw toothed flour beetle
4. Saw toothed grain beetle
5. rice moth
6. fig or almond or warehouse moth
7. Indian meal moth



### Lasioderma serricorne



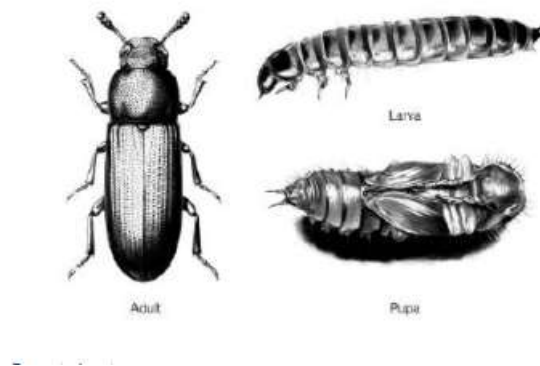
Trogoderma granarium (adult and larva)



Cadra cautella (adult, lava and pupa)



Plodia interpunctella (indianmeal Moth)



Tribolium castaneum (adult, larva and pupa)

### **Storage pest's control**

Pest control is the process of regulating pests (rodents and insects) based infestation as per standard operating procedures of an organization or management.

### **Storage control methods**

- a) Sanitation. This is the more effective way of preventing pests from infesting stored goods. This is done by cleaning the location or storage area to eliminate insects' purpose and adults.
- b) Monitoring stored goods. This can be carried out by either physical inspection by a warehouse personnel or using monitoring equipment such as traps and monitoring tubes.
- c) Physical methods. This can be conducted through physical exclusion where the infested goods are excluded from the ones that are not yet infested by the pest.
- d) Temperature control and aeration. It is the process of using low volume airflow to cool stored grains aeration. This is an important component of stored grain pest control since storing grains in a cool or low temperature slows pest development
- e) Vacuum sealing. This is a practice of generating a low oxygen condition for organic storage goods.

### **Factors considered when choosing a storage control method**

- a) Types of goods
- b) Skills required. This is a technically handling pest control method. It is important to consider that one is a professional and knowledgeable enough to apply a certain pest method control.
- c) Cost of applying the pest control method. One should compare prices of the several methods.
- d) The speed of interaction. Depending on the impending circumstances on hand, most pesticide have varying speed of intervention with pests.
- e) Safety. The residue life and the environment hazards listed on the pesticide should be of high priority.

### **Benefits of controlling storage pests**

- a) Increased levels of income due reduced infestation of insects in the stored goods.
- b) It helps in reducing the cost of running business hence managing the organization bottom line.
- c) It helps in keeping a warehouse safe from pest infestation by eliminating pests you can help to prevent fires stock contamination and diseases.
- d) It helps in maintain good reputation of the company gossip from the unsatisfied customers due to poor pest control can be detrimental.
- e) Pest control meets compliance regulation as provide in the constitution as for health and environmental factors are considered.

### **Pest control in a warehouse**



**Figure 21: Warehouse Pest Control**

### **Challenges to effective pest control**

There are several challenges to effective pest control. These include:

- The cost implications involved
- The sensitivity of the items in the warehouse
- Sometimes there is poor ventilation in the warehouse and this provides effective conditions for pests to thrive.
- Congestion of goods in a warehouse due to the optimization of the space



## 4.2 Storage/warehouse security measures and best practices

**Figure 22: Poorly Ventilated Warehouse**

There both external and internal storage/warehouse security measures in the organization

### **External security measures**

These are physical measures, which must be put in place to ensure the safety of the warehouse. The warehouse owner must be vigilant to ensure the safety of the secured goods. Some of the external measures include:

- a) CCTV. This is a deterrent to potential external thieves and also acts as safeguard in the external building.
- b) Locking devices and key controls. This is making sure external and internal windows doors gates and fences are securely fitted with proper locking devices
- c) Lighting. It is the provision of adequate light both inside and outside of the building.
- d) Car parks and access points. It is essential to separate shipping docks of offloading areas from general staff and visitor car parks to eliminate chances of swiftly removing items.
- e) Walk through. They should be provided for owners to frequently walk through the warehouse for effective monitoring of the business.
- f) Limited access to the warehouse. Is limited with one primary door for all member staff visitors and guests.

### **Internal security measures**

- a) Storing goods according the manufactures instructions on the safety data sheet
- b) Ensuring that flammable substance is correctly stored in suitable containers
- c) Avoid overfilling container
- d) Wearing protective clothing

- e) Ensuring adequate ventilation
- f) Trainee employers properly on handling goods

### **4.3 Receiving and ensuring goods**

Receiving. Is the act of taking possession of products in order to stage them for inspection place them into inventory or deploy them to the end user or requester for immediate use?

Issue goods. Is the process of moving products from storage rooms to production consumption and service areas?

#### **Factors to consider when receiving goods**

- a) Product code
- b) Description
- c) Rotation date (receipt data/use bio data/manufacture date)
- d) Shelf life
- e) Batch/lot
- f) Weight/fixed weight random and catch weight
- g) Serial number
- h) Barcode/pack id/LPN

#### **Preparation for receiving**

- a) Provide adequate space for receiving
- b) Provide needed receiving equipment such as cost and dollies
- c) Establish allowance delivery periods and communicate these to vendors
- d) Identify and train receiving personnel
- e) Develop or record system for recording the acceptance of delivered

#### **Issuing goods procedure**

- a) Design standard form to handle request for issues of inventory items
- b) Raise requests for issues of inventory items using standard request form
- c) Ensure that request for issues are justified supported by production job orders before endorsement as appropriate
- d) Verify the issue request before issuing the items and require the receiving staff to acknowledge receipt on the form with a copy sent to the account section
- e) Issue the stocks on first in first out basis particularly for items with an expiring date on a limited shelf life updates the inventory movement records without delay
- f) Update the accounting records according to the requests forms daily signed by parties concerned.

### **Method of issuing goods**

They are a number of ways to issue goods methods and some of them include:

- a) Impress method- With the impress method, the quantity to be ordered is the quality necessary to restore the goods on hand to a pre-agreement fixed quality
- b) First in first out- The goods are assumed to be issued from the earliest lot in a hand. the stock of goods on hand therefore consists of the latest purchased
- c) Last in last out- Under these method goods issued are valued at the price paid for the latest lot of the goods. In other words, stock of goods on hand will be valued at a price paid for earliest lost. LIFO method is based on the irrational assumption that goods entering last in stores are consumed first.
- d) Replacement issue- In most engineering industries a large number of workshop machines are used and hence so there will be considerable requirements as tools and gauge
- e) Issue per schedule- The requisition for the issue of stones is sent well ahead indicating when i.e. the time and date is required
- f) Issue on request- This is the most orthodox way of issue where in the identity department normally sends a man and collects the material from stores.

### **Inventory valuation**

Inventory valuation is the cost associated with an entities inventory at the end of report period.

### **Calculation of inventory value using FIFO, LIFO and WAC**

To see how FIFO, LIFO and WAC might play out, consider the following scenario. Company ABC purchases 10,000 widgets this year. It sells 7,600 widgets which means it has 2,400 widgets left as unsold inventory at the end of the year.

Legal requirements in maintenance of stored goods

**ABC makes the purchases on the following dates:**

January: 3,000 widgets at \$1.00 per widget (total cost \$3,000)

April: 3,000 widgets at \$1.25 per widget (total cost \$3,750)

July: 4,000 widgets at \$1.10 per widget (total cost \$4,400)

Total purchase price: \$11,150

**It sells 7,600 widgets on the following dates:**

February: 3,800 widgets at \$2.00 (total price \$7,600)

August: 3,800 widgets at \$1.80 (total price \$6,840)

Total sales: \$14,440

**The formula for cost of goods sold:**

$(\text{Beginning inventory}) + (\text{inventory purchases}) - (\text{ending inventory}) = \text{cost of goods sold.}$

**Under FIFO:** The inventory is valued at \$2,640 (2,400 at \$1.10). Cost of goods sold (assuming no beginning inventory) is \$8,510 ( $\$0 + \$11,150 - \$2,640$ ) and gross profit comes to \$5,930 ( $\$14,440 - \$8,510$ ).

**Under LIFO:** Inventory is now valued at \$2,400 ( $2,400 \times \$1.00$ ). Cost of goods sold would be \$8,750 ( $\$0 + \$11,150 - \$2,400$ ) which reduces the gross profit to \$5,690 ( $\$14,440 - \$8,750$ ).

**Under WAC:** The average cost per widget is \$1.115 ( $\$11,150/10,000$ ). Inventory would be valued at \$2,676 ( $2,400 \times \$1.115$ ) and the cost of goods sold would be \$8,474 ( $7,600 \times \$1.115$ ). This gives the highest gross profit of \$5,966.

Then;

- Decide upon the storage classes and be controlled
- Create your own if necessary
- Decide upon the warehouse storage types for which placement of these classes of materials is to be allowed or disallowed
- Assign the allowed storage classes for each storage type where checking has been activated
- Create the relevant hazardous material number for each storage class.
- Assign the relevant hazardous materials number to each material that needs to be controlled

#### **4.4 Stored goods are secured from adulteration as per workplace policy**

Adulteration of goods has become a critical issue that warehouse owners need to address stringently if they have to ensure the safety of the stored goods. This must be in line with warehouse safety principles. Safety procedures need to be followed to the later if goods have to be secured effectively. Some of these principles include:

- Ensure that safe equipment is used at all times
- There is need to eliminate any potential threat or hazard in a warehouse
- There is need for clear labeling of the designated areas that prone to security threats.
- Use safe lifting techniques
- Provide refresher courses to people working in the warehouses
- Sensitize your workers on the need to have safety precaution measures

Read more on the link below to read more on the workplace safety manual to ensure safe keeping of goods in a warehouse.

<https://wdra.gov.in/documents/32110/36956/WAREHOUSEMANUAL30012013.pdf/59242e97-ca3c-d755-e08>

#### **4.5 Store is maintained as per (OSHA, Factories act, employment act, EMCA 1999, Public health Cap 242**

These are regulations that have been enacted to guide the storage of goods in a warehouse and ensure safe handling of goods. The Factory Act of 1948 was enacted to consolidate and amend the law regulating labor in the factories. It provides safety and security provisions and focus on inspection and enforcement of the provisions.

Some of the provisions of the Act on safety and security provisions include:

- Fencing of the machinery
- Work or near machinery in motion
- Employment of young people in dangerous machines
- Striking gear and devices for disconnecting power
- Self-acting machines
- Revolving machinery
- Protection of the eyes
- Safety rules



**Figure 23: Warehouse Maintenance**

Read more on the link below to insert images of safety precaution as provided by the Factory Act of 1948

<https://www.google.com/search?client=firefox-b-ab&ei=d8mGXf2dF8mMlwSq0LtY&q=store+maintenance+as>

The Employment Act, on the other hand, addresses the fundamental rights of the employees. It provides the basic conditions for the employment of employees and regulates the employment of children. Some of the key provisions of the Employment Act include:

- Employment relationship
- General principles
- Protection of wages
- Rights and duties in employment
- Termination and dismissal
- Protection of the children
- Insolvency of the employer
- Employment records
- Employment management
- Foreign contract of service
- Discipline settling procedure

## Conclusion

In conclusion, this learning outcome equipped the trainee with skills, knowledge and competences needed to address the storage pests and prioritization on utilization of stored goods. It has covered the tips to warehouse safety in addition to effective pest control mechanisms. You are expected to do further reading on the legal framework that governs the operations of the warehouse safety.

## Further Reading



Employment Act of 2007  
The Factories Act of 1948

### 3.3.5.3 Self-Assessment



#### Written assessment

1. Goods are arranged in the store based on their categorization (true or false)
2. Goods are stored based on their storage requirements (true or false)
3. Outline the benefits of storage pests' control
4. Highlight the types of insects that can infect in the warehouse
5. Outline the factors to consider when selecting storage pest control methods

#### Oral assessment

1. Define the difference between FIFO and LILO
2. What is the significance of the Employment Act as appertaining the rights of employees?

#### Practical assessment

1. Control storage pests (rodents and insects) based on infestation as per standard operating procedures in a warehouse that you have visited

### 3.3.5.4 Tools, Equipment, Supplies and Materials

- computers
- stationary
- classroom and classroom resources
- the constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015
- Public Officers Ethics Act

- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample procurement Documents
- Sample case studies on procurement, 2009

### **3.3.5.5 References**

Fayol henry 2013 translated reprint general and industrial management

Folinas, D., & Fotiadis, T. (2017). *Marketing and Supply Chain Management: A Systemic Approach*. Routledge.

Rim, S. C., Jiang, J., & Lee, C. J. (2014). *Strategic inventory positioning for MTO manufacturing using ASR lead time*. In *Logistics Operations, Supply Chain Management and Sustainability* (pp. 441-456). Springer, Cham.

### 3.3.6 Learning Outcome No 5: Maintain optimum stock levels

#### 3.3.6.1 Learning Activities

| Learning Outcome No 5: Maintain optimum stock levels                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                               | Special Instructions                                                                                                                                                                                                                    |
|                                                                                   | 5.1 Order goods with due consideration to available storage space as per standard operating procedures<br>5.2 Perform stock control to ensure optimum stock levels are maintained as per work place policy<br>5.3 Stock taking regularly to ensure records tally with physical stock as per standard operating procedures<br>5.4 Perform stock verification regularly to establish efficiency stores record management<br>5.5 Identify demand forecasting methods | <ul style="list-style-type: none"><li>• Visit a warehouse</li><li>• Carryout stock taking in groups</li><li>• Visit a busy supermarket and interview the supply chain manager on the stock taking procedures in the warehouse</li></ul> |

#### 3.3.6.2 Information Sheet No3/LO5: Maintain optimum stock levels



##### Introduction

This learning outcome will empower trainees with skills, knowledge, attitudes, values and behavior to be able to contextualize the process of ordering goods based on available storage space, stock verification and identifying demand forecasting methods. Objectives of optimum stock levels are to have displays that attract attention to the merchandise and to foster faster movement of the goods, hence increasing the profit margins. The trainee will be exposed to the purchase order processes.

##### Definition of key terms

**Base stock:** The quantity of stock that is replenished after it is sold to customers

**Buffer/safety stock:** Quantity of stock that is advised to be maintained to overcome any shortages that may occur during the head time (time gap between placing an order and receiving inventory)

**Inventory control:** having accurate, complete and timely inventory transaction record to monitor current stock levels and ensure right quality available at the right time

**Optimal Stock:** Refers to factors leading to low probability of not hitting stock out levels. This is the most cost effective stock to have at a particular time

## **Content/procedures/methods/illustrations**

**5.1 Ordering of goods is done with due consideration to available storage space as per standard operating procedures.**

### **Purchase order process and procedures**

Purchasing describes the knowledge of stock requirements, identifying and selecting supplier and negotiating price. Deciding on the specifications of your purchase including quantity, quality assurance and delivery schedule.

The main steps in the purchase cycle are:

- a. Recognition of need
- b. Description of need
- c. Selection of supplier
- d. Determination of price
- e. Preparation for purchase order
- f. Placing order with selected supplier
- g. Monitoring and follow up
- h. Receiving the order stock
- i. Checking and approving for payment to supplier

### **Importance of Purchase process and procedure**

#### **1. Cost effective**

Cost of inventory should be friendly to the organization to avoid high ordering costs.

#### **2. Quality assurance**

Ensures substandard goods are avoided in the course of the business

#### **3. Inventory Management**

To avoid under inventory and over inventory and assist to maintain the status quo

#### **4. Shorter cycle time**

This helps in time management between ordering and delivery time

#### **6. Strategic purpose**

Purchasing is a strategic issue that needs analytical decision making to ensure that optimum decisions are made that will add value to the business.

### **Purchase procedures for a well-run business**

There are several set of purchase procedures that guide the process of purchasing. It sets out each person's responsibilities in the purchasing cycle, as well as, detailing each of the specific purchasing procedures. There are several purchase procedures that one would expect to find in a purchasing department. These include:

- Purchase from the key suppliers and always ensure that you have an agreement signed between you and them.

- Ad hoc Purchases- This occur when an unusual item is needed and there may not be an agreement between you and the supplier; so, this procedure will enable you to make unusual requests.
- Large Purchases-This is where large pieces of equipment are needed and there is a need for tendering to ensure that bidding is done for the items to be purchased
- Change of Purchase-This is where purchase is done and there is a need to return the item or exchange
- Goods Received-There must be procedures to be followed to ensure that goods are received in the right way
- Good Damaged-This is when goods received are damaged on delivery and so there is need to inform the supplier immediately.
- Payment-The supplier will demand to be paid once the goods have been delivered.
- Stock-It is important for the accounting department to ensure that there is ample stock at all times
- Contract and contract Renewals-It is important to ensure that the terms of engagement are clear so that suppliers can supply goods with ease

## 5.2 Stock control is done to ensure optimum stock levels are maintained as per work place policy

### Stock Control

Stock control is concerned with how much stock you have at any given time and keeping track of it. It ensures that funds are not tied up unnecessarily and that the threat of stock losses is reduced, thus ensuring sufficient stock to meet customer demands (optimal stock levels) System components with inventory can be illustrated as shown below.

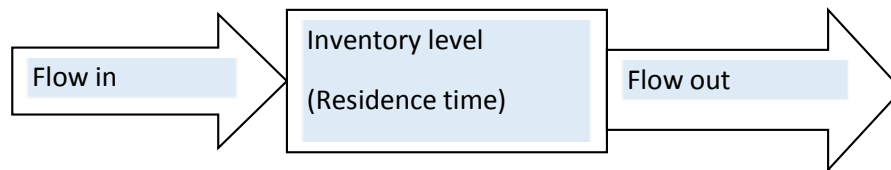


Figure 24: Stock Control Flow

Items flow into the system and remain for some time and then flow out.

### Reasons for keeping stock

#### Time

Time lags present between suppliers to user is bridged by maintaining certain amount of stock

#### Uncertainty

Is a buffer to meet uncertainties in demand, supply and movement of goods. This assists to meet unexpected demands

### Economics of sale

Bulk buying movement and storing brings in economies of scale, taking advantage of price discount.

### Hedging against price increase

Avoid ever-fluctuating market prices and this will insulate the business from making immense losses.

**Encourage production, Purchase** and transportation, hence customer satisfaction

Inventory decisions involve a delicate balance between three classes of cost. These are:

- a) Ordering cost-cost of replenishing inventory
- b) Carrying cost –cost of holding on item inventory
- c) Shortage Cost-Temporary or permanent loss of sales when demand cannot be met

Inventory management is a careful balancing act between stock availability and the cost of holding inventory as illustrated in the figure that follows below:

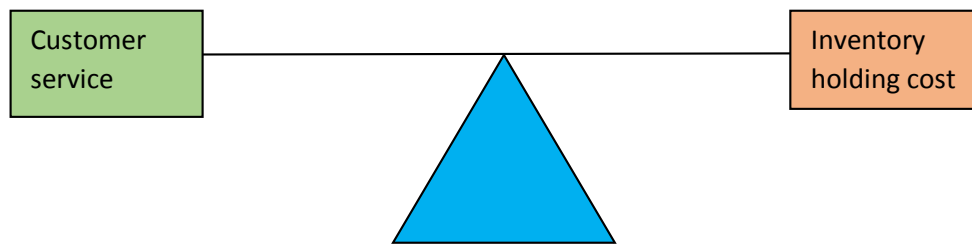


Figure 25: Balancing customers service vs inventory control

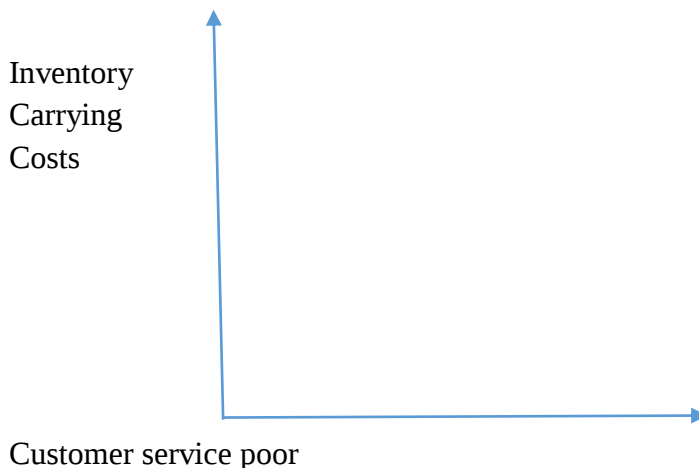


Figure 26: Inventory management

### 5.3 Stock Taking

Also known as inventory checking is the physical verification of quantities and condition of items held in an inventory for accurate inventory audit and evaluation. This will enable the firm to know the worth of the business at that point in time.

### **Importance of stock taking**

- a) Determines how well your business is operating by analyzing the profit margins that are there.
- b) Confirms your gross profit through accurate monitoring and they will assist to know the viability of your business.
- c) Pin points on any stock problems e.g. theft, defaulted goods
- d) Aids you with pricing strategy. This means one is able to determine the most appropriate price for the commodities
- e) Provides accurate account of the stock you hold.
- f) Highlights specific good and bad product and this determines sales performance
- g) Identifies how to reduce stock levels and improve cash flow
- h) Identify slow moving stock and see how best to promote it.
- i) Improve stock management and control

### **a) Methods of stock taking**

#### **Periodic stock count**

Physical stock is counted and recorded then compared with stock validation file on a given time period e.g. Monthly quarterly or yearly

#### **Perpetual Stock count**

Done throughout the year as per a pre-determined plan of action where a detailed analysis of the condition in stock is possible with this system

#### **Spot check**

Carried out when receiving stock or issuing stored items. This method is not widely accorded official recognition since it does not have continuous system of stock verification.

#### **Annual stock taking**

The process is done in the last month of the financial year once. This requires closure of store for some duration or suspends receiving and issuing of stock

#### **Stock validation**

Stock out validation is done in situations where particular items are out of stock or incredibly low levels. It helps with minimizing a repeat of stock out and addressing such occurrence.

## **b) Stock Taking Schedule**

### **Plan on undertaking**

Find the appropriate time to reduce impact on business operations such as during a slow sale cycle or outside a normal business operation

### **Create well defined sections**

This helps making it easy to find and count your stock reducing possibility of miscounting. This can be done through labeling the shelves.

### **Ready stock taking aids**

Tools to be used should be organized and well-kept ahead of the exercise. This saves on time on counting. Tools such as clip board's stock sheets, calculators and pens are used to expedite the process.

### **Use up to date inventory data**

Get an accurate count of the inventory you actually have so that you can compare with existing inventory data.

### **Clear knowledge of inventory**

All the stocks to be counted should be well known for a clear system for how they should be physically counted.

### **Prepare counting time**

Give everyone clear goals and responsibility clearly recognizing what needs to be done and how to do it.

### **All-inclusive count**

Ensuring all items with respect to inventories should be opened and counted absolutely everything for exact amount to be captured. Develop brain storming ways to decrease stolen, broken or slow selling inventory through improved warehouse policies to curb reckless behavior and strategies to sell.

### **Demand forecasting**

It is a technique for estimating probable demand for a product or service in the future. The process of demand forecasting is impactful to the organization in:

- Fulfilling objectives of the business
- Preparing the budget
- Taking management decisions
- Evaluating performance

## **Methods of demand forecasting**

Survey of buyers' choice

Potential customers are directly interviewed. This survey can be done in any of the following ways:

- Complete enumeration method –Nearly all buyers are asked about their future purchase plan and this will enable the business to predict the future needs of the customers.
- Sample survey method-A sample of potential buyers scientifically selected and only those chosen are interviewed and this is meant to give an accurate representation of demands of the customers.
- End use Method-Final users are identified and interviewed so as to get their perceptions on the items that they have been consuming

## **Collective opinion method**

Sales person of firms predict the estimated future sales and then inform the making of critical decisions about anticipated sales.

## **Barometric method**

Based in the past demand of product and ties the past project with the future

## **Market experiment method**

Conducting market studies and experiment on customer behavior under actual but controlled market conditions.

## **Expert opinion method**

Experts are questioned and asked to forecast the demand of the items with a view to informing the firm to make critical decisions

## **Statistical methods**

These are scientific reliable and free from biases

Trend projection method –Use past data of sales to predict future trends

Regression Analysis-Establishes relationships between dependent and independent variables to form a regression equation assuming linear relationship  $y=a+b$

## **Conclusion**

In conclusion, this learning has equipped trainees with skills, knowledge and behavior in order to be able to conceptualize the concept of optimum stock levels. It has further exposed the trainee demand forecasting. You are encouraged to read more on reasons for hoarding stock.

## Further Reading



Read further information on stock scheduling as per different sectors

## 3.3.6.3 Self-Assessment



### Written Assessment

- 1.) Identify cost that is not related to stock control
  - a) Ordering cost
  - b) Selling cost
  - c) Carrying cost
  - d) Shortage cost
- 2.) Determine whether the following statement is true or false, safety stock is the same as base stock
  - a) True
  - b) False
- 3.) Which of the following is not a stock taking method?
  - a) a). Annual
  - b) b). perpetual
  - c) c). Stock out
  - d) d). Stock in
4. The following factors affect optimal inventory level except
  - a) Stock out
  - b) Purchase price
  - c) Supplier reliability
  - d) Re-order level
5. Stock count investment helps in carrying out audit. Comment on this statement
  - a) True
  - b) False
6. Clearly define a stock out
7. State the various cost involved in inventory management
8. What is the importance of demand forecasting?
9. In your own understanding, explain the concept of safety stock
10. Explain five methods of stocktaking

### Oral Assessment

1. Enumerate the various purpose of stock taking
2. What are the importance of purchase processes?

### **Practical Assessment**

Consider a typical company that is carrying out an inventory count. The nature of the operation is on fast moving goods. It is currently on a pick season. Clearly advise on the need scheduling and methods to be used.

#### **3.3.6.4 Tools, Equipment, Supplies and Materials**

- computers
- stationary
- classroom and classroom resources
- the constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Suppliers Manual
- Sample procurement Documents
- Sample case studies on procurement, 2009

#### **3.3.6.5 References**

Wild, T. (2017). *Best practice in inventory management*. Taylor & Francis.

Toomey, W (2012). *Inventory Management: Principles, Concepts and Techniques*. Springer Science & Business Media.

### 3.3.7 Learning Outcome No 6: Secure stored goods

#### 3.3.7.1 Learning Activities

| Learning Outcome No 6: Secure stored goods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                         |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Special Instructions                                                                                                                                    |  |
| 6.1 Store high value goods in locked cages within the stores as per standards operating procedures<br>6.2 Build stores of strong walls and reinforce roofs as per standards operating procedures<br>6.3 Lock up stores at all times as per work place policy and standards operating procedures<br>6.4 Watch stores at all times as per workplace policy and standards operating procedures<br>6.5 Vet stores watchmen as per workplace policy and standards operating procedures<br>6.6 Monitor Security surveillance systems (CCTV, Alarms, Clock in cards)<br>6.7 Assess risk of theft of stored goods and put in place mitigation measures as per workplace policy | <ul style="list-style-type: none"><li>• Field visit to check how goods are stored</li><li>• Case study to learn security surveillance systems</li></ul> |  |

#### 3.3.7.2 Information Sheet No3/LO6: Secure Stored Goods



##### Introduction

This learning outcome will train on skills, knowledge and behavior to safeguard stored goods at times to reduce possibility of theft and loss. It will point out the various strategies that can be applied by a firm to secure goods. It will address the mitigation strategies that could be put in place to be able to prevent loss of goods.

##### Definition of key terms

**Cages:** Security cages are designed for use in warehouses for safe and damage free transportation of goods. These cages enable easy inventory checking and ensuring that goods handled can be accessed.

**Reinforce roof:** In addition to the area occupied by the warehouse, there should be sufficient usable space. Warehouse roofs should be “free span” without internal supporting pillars.

**Monitor:** To identify and correct warehousing errors or some processes soon after they occur, by monitoring whether warehousing transactions are carried out in a timely manner.

**Mitigation:** These are measures to prepare for and lessen the effects of theft or loss of stored of goods.

## **Content/procedures/methods/illustrations**

### **6.1 High value goods storage**

High value product goods are goods that are high in value and always expensive, they may include cars, jewellery designer items among others. These kinds of merchandise require some degree of special consideration.

#### **Types of high value goods**

- a) Cars
- b) watches
- c) Precious stones
- d) Jeweler
- e) Designer goods

Ways to secure High value items

#### **i) Use of cages**

Pallet and stillage cages are one of the most effective ways to secure high value goods. These cages are normally locked and increase efficiency while they reduce risk of loss.

#### **ii) Limited access**

Keeping valuable items out of reach for everybody. Few people can be given access to the place where the high value items are stored.

#### **iii) Keeping out of reach**

High value goods can be stored in upper bags that may require a ladder for access. This reduces the chances of damaging them

### **Factors to consider when storing high value goods**

- Good access to the stock
- The location of the inventory
- Personal safety
- The value of the goods to be stored
- The period of storage
- The security of the storage area

### **6.2 Stores are built of strong walls and reinforce roofs**

Stores must be built to be strong to ensure that commodities are protected at all times. This will ensure security of the goods.

### **Warehouse roofing**

Roofing of stores is a vital part in protection of stored commodities

Solid roofs allow goods to be stored for years and not worry about spoilage

Examples of warehouse roofing options are:

- Built up roofing
- Modified bitumen system
- TPO

Internal pillars supporting roof frames should be avoided for easy pest control and stock management. Modern engineering techniques allow wide free span roofs without internal supporting pillars

### **Warehouse building materials-walls**

Stores should be constructed with reinforced concrete

A vapor proof barrier should be incorporated in the base of the walls to prevent damp rising which may cause damage to the warehouse.

## **6.3 Warehouse Security**

Security is the protection against the intentional damage. There are measures taken against espionage, attacks or crime

### **Security measures in stores**

#### **a. Security surveillance system**

CCTV is not recommended as a standalone system. It acts as a deterrent to potential thieves in external and as a safeguard to internal buildings.

#### **b. Locking devices and key controls**

Stores must be locked at all times. External and internal windows doors, gates and fences must have proper and secure locking devices. Doors may also have access codes that may be changed when need arises with limited access.

#### **c. Security training of employees**

Employees should be assisted with the ability to maintain integrity in the store. Potential threats must be recognized and action taken accordingly. Consequences should also be put into consideration.

**d. Store lighting**

Adequate lighting both inside and out of the store building is key. Lighting ensures that every point can be clearly seen. All entrances, exits, cargo handling fence lines, parking areas and along the fence

**e. Car parks and access points**

It is essential to separate the loading zones for cargo from general staff and visitors car park to eliminate chances of swiftly removing items

**f. Supervision and walk through**

Senior members of staff and supervisors should frequently walk through the warehouse to check the activities and process that are taking place. It is an effective way of monitoring the business.

**g. Hiring the right people**

Hiring the right staff is very important. The recruitment process should be rigorous and thorough to ensure that the right staffs is being absorbed.

**h. Protect entrance points**

Invest in steel security doors which provide additional levels of protection with locking systems and impact proof properties. Watchmen may also be put in the entrance for further security.

**i. Secure stock and inventory**

Protecting stock on its own is also important. Security cages increase protection, which may be built in close fitting areas. Controlled ventilation can also protect the stock

**j. Secure delivery points**

Steel security grills is recommended as an additional measure of security on windows and doors

**6.4 Emergency security protocol**

These are plans of action that are to be conducted in a certain manner or order in response to a reasonable foreseeable emergency in a store. A situation that possesses an immediate risk to health, life or property. These situations include

- Fire/smoke
- Personal injury
- Personal threat
- Bomb threat
- Suspicious package
- Biohazard spill

**Measures to be taken to prepare for emergency situations include:**

**a. Installing fire extinguishers**

Fire extinguishers must be put in all the areas in the store so that in case of fire, they can be used to prevent loss and damage.

Visible signs like “EXIT” must be clearly marked for easy visibility during an emergency, evacuation routes cleared and assembly points clearly marked

**b. Training employees**

Employees must be trained on how to tackle an emergency and trained how to use equipment like fire extinguisher and first aid.

**c. Emergency contact numbers**

Emergency contacts like those of the police and ambulances must be written down for employees

**d. Safety gears**

Employees must have protective gear while handling stock in the store. These gears include helmets gloves, masks, among others.

**e. First aid equipment**

First aid equipment must be made available and this may help to deal with minor injuries.

**Advantages of securing stored goods**

- i) Securing protects high value goods in stock
- ii) Prevents loss of goods e.g. like breakage and leaking
- iii) Securing goods prevents theft and pilferage
- iv) It saves on cost
- v) Increases profitability

**Limitations**

1. It is costly to set up security measures in the store. E.g. surveillance cameras, steel doors and modern locking devices.

**6.5 Stores watchmen are vetted as per workplace policy and standards operating procedures**

**Importance of security guards**

1. Security guards provide a visible deterrent to criminals and provide professional protection for your stored goods in the warehouse
2. They guard and patrol the warehouse

3. ensure that all areas of the building are securely locked and that no unauthorized persons have access to the warehouse
4. document all suspicious activity and report anything dangerous immediately to the authority
5. They the inner and outer premises of the property
6. Provide a sense of security for the staff

### **Considerations when hiring watchmen**

1. Cost of hiring the watchmen
2. How well the watchmen have been trained
3. Past experiences of the watchman
4. Is the company's security main focus?
5. Technology (how vast they are with new trends in security technology)
6. Motivation to guard the warehouse
7. Administration skills
8. Interpersonal skills

### **6.6 Security surveillance systems (CCTV, Alarms, and Clock in cards) are monitored**

- **CCTV** – whilst we certainly don't recommend CCTV as a stand-alone system, the addition of video security will benefit you in a number of ways. Firstly, acting as a deterrent to potential thieves who may think twice with the gadgets installed prominently in external locations, but also as a safeguard in the internal building.
- **Alarms**- External and internal windows, doors, gates and fences should be securely fitted with proper locking devices with alarm systems. Whether access control systems which are ideal for commercial premises where the ability to change codes with ease is necessary or simple yet effective padlocks which protect against theft, vandalism, and unauthorized entry.
- **Clock in cards**- A clock card, also called a time card, is a source document that records the number of hours each employee works during a pay period. This not only creates a document that the payroll clerk can use for preparing payroll, it also creates an internal control. Employees are not in charge of keeping track of their own working hours. The clock card does it for them. This system helps decrease fraud and payroll scams.

## **6.7 Risk of theft of stored goods is assessed and mitigation measures put in place as per workplace policy**

1. Run background checks on all new employees.

Ensure that all employees are well-trained on policy to prevent accidental loss.

Institute modern inventory management and POS software to make it easier to monitor for discrepancies.

2. Check stock regularly

Have employees check each other's bags before they leave for the day

Implement surveillance software

3. Fire employees who steal from the warehouse

### **Conclusion**

In conclusion, this learning outcome equipped trainees with skills, knowledge and competences to safeguard stored goods at times to reduce possibility of theft and loss. The learning outcome has also addressed the ways of securing high-value items in addition to factors to consider when storing high-value goods

### **Further Reading**

**Read further on safety security measures**

#### **3.3.7.3 Self-Assessment**



#### **Written Assessment**

1. Which one of the following best describes measures to prepare for and lessen the effects of theft or loss of stored goods?
  - a) Mitigation
  - b) Reinforcement
  - c) Vetting
  - d) Security
2. Which one of the following is not a safety security measure?
  - a) Surveillance cameras
  - b) Secure stock
  - c) Safety gear
  - d) Locking devices
3. Which is not an example of warehouse roofing options?
  - a) Reinforce roofs
  - b) Built up roofing

- c) Modified bitumen system
- d) TPO
- 4. Good housekeeping in stores helps to prevent slips
  - a) True
  - b) False
- 5. Safety is protection against intentional damage
  - a) True
  - b) False
- 6. Which one of the following is an emergency in the store?
  - a) Bio hazard spill
  - b) False alarm
- 7. Define security cages in warehousing of procured goods
- 8. Define a warehouse
- 9. Three types of high value goods
- 10. Factors to consider when storing high value goods
- 11. Describe the term reinforced roofs

#### **Oral Assessment**

1. Which criteria can be used to vet stores watch men as per the work place policy
2. Mention three examples of high value goods
3. What is the significance of security surveillance system?

#### **Practical Assessment**

1. You are supervisor in a store and you notice that a bag of expensive jewellery is missing from the security cages, what measures will you undertake to ensure that the jewelery is recovered
2. Mr. Latema saw smoke coming from the back of the store while doing a walk through, what is the first measure he should take as the floor supervisor?
3. You are an employee of a warehouse in industrial area and you over hear colleague planning to steal items from the stores, what action will you take to prevent the loss of good?

#### **3.3.7.4 Tools, Equipment, Supplies and Materials**

- computers
- stationary
- classroom and classroom resources
- the constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015
- Public Officers Ethics Act
- Anti-corruption and Economic Crimes Act 2003

- Public Finance Management Act 2012
- Suppliers Manual
- Sample procurement Documents
- Sample case studies on procurement, 2009.

#### **3.3.7.5 References**

Benedict, C.E., Pfeifer, B.G., Yates, C.A., Bladen, S.K., Lackinger, R.E. and Dobbs, J.R., Tesseract International Inc, 2014. Warehouse storage system. U.S. Patent 8,651,790.

Kumar, A., & Rahman, S. (2014). RFID-enabled process reengineering of closed-loop supply chains in the healthcare industry of Singapore. *Journal of cleaner production*, 85(1), 382-394.

Thorat, A. R., & Patil, S. K. (2017). A Study of Performance of Pre-Engineered Building of an Industrial Warehouse for Dynamic Load. *International Research Journal of Engineering and Technology (IRJET)*, 4(6), 2240-2246.

## **CHAPTER 4: DISTRIBUTION OF STORED GOODS/ OVERSEE DISTRIBUTION OF STORED GOODS**

### **4.1 Introduction**

Oversee distribution of stored goods is a unit of competency TVET level 6 qualification for supply chain. The unit covers knowledge, skills and behaviour in distribution of stored goods. The competencies required are to distribute goods to customers and efficient physical movements of goods from warehouses /stores to authorized cutomers. Distribution of stored goods helps in saving the storage cost, enabling rotation and circulation. This helps in avoiding risks and loses and delivering goods and services at the right time and place.

The critical aspects covered in this unit include; identifying and locating prospective customers, estbalishing distribution routes, categorizing good and assigning suitable means of transport. It also involves facilitating the fitting of tracking systems for fleet monitoring, supervision of goods deliver, endorsement and surrendering of delivery notes. The basic resources required include: computers, stationery, classroom and classroom resourses, suppliers' manual, public finance management Act 2012 among others. The unit of competency covers four learning outcomes. Each of the learning outcomes comprises of learning activities that have performance criteria statements that help the trainee get an opportunity to demonstrate knowledge and skill in the occupational standards and content in the distribution of stored goods. The competency can be assesed through written test, observation, oral questioning and third party report. At the end of each learning outcome there is a section for self assessment. The trainees are expected to familiarise themselves with the governing Acts relevant to the industry sector and workplace.

### **4.2 Performance Standard**

Establish and organize goods distribution channels and logistics, track movement of goods and oversee delivery of goods to customers as per workplace policy, standard operating procedures, principles of cost minimization, transport and safety requirements, nature of goods and clients' terms and conditions of delivery.

### **4.3 Learning Outcomes**

#### **4.3.1 List of learning outcomes**

- a) Establish goods distribution channels
- b) Organize goods distribution logistics
- c) Track movements of goods
- d) Oversee delivery of goods to customers

### 4.3.2 Learning Outcome No 1: Establish Goods Distribution Channels.

#### 4.3.2.1 Learning Activities

| Learning Outcome No 1: Establish goods distribution channels.                     |                                                                                                                                                                                                                                                                       |                                                |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                   | Special Instructions                           |
|                                                                                   | 1.1 Identify prospective customers by location as per workplace policy<br>1.2 Draw a map of customers based on their location as per standard operating procedures.<br>1.3 Establish the most efficient distribution routes based on principles of cost minimization. | Role play may be used to cover the activities. |

#### 4.3.2.2 Information Sheet No4/LO1: Establish Goods Distribution Channels.



##### Introduction

This learning outcome will help the trainee cover the identification of prospective customers by location as per workplace policy, drawing a map of customers based on the location as per standard operating procedures and establish efficient distribution routes based on principles of cost minimization.

##### Definition of key terms

**Goods:** These are physical products purchased or manufactured on request or demand for consumption or commercial purposes.

**Distribution channel:** This is the path or flow by which goods and services follow to reach the intended customer or consumer

**Prospective customers:** This is the person who has financial resources to buy a certain product/goods or services he/she has interest in

**Cost minimization:** it is the financial strategy that considers the most cost-effective way to obtain goods and services while maintaining the level of desired quality.

##### Content/procedures/methods/illustrations

#### 1.1 Prospective customers are identified by location as per workplace policy.

Prospecting is the process of searching for potential customers or buyers for the sake of developing a new business or doing business.

##### Steps to prospecting

- a) Do research. By doing research, the following goals are observed:
  - Ensure the prospect is workable or attainable.

- Qualify and begin prioritizing.
  - Find ways to develop a connection personalization and trust development.
- b) Prioritize the prospects. This step helps in saving time since it ensures that strong efforts are dedicated to prospects most likely to become customers.
- c) Prep the outreach. This step helps in gathering more information on the prospects in order to build a strong outreach. The following are considered:
- Find social media presence and evaluate their posts and interests if any.
  - Check the company website to view 'About us' information.
- d) The first touch. The first impressions are important. The first outreach should be exceptional and flawless in every way possible: the following is applied when using email or phone calls:
- Personalize by referring to a given problem that the prospect is currently facing.
  - Be human and courteous to avoid unnecessary negative energy.
  - Be relevant and time conscious by going straight to the point.
  - Keep the conversation casual by not dwelling too much on the sales pitch.

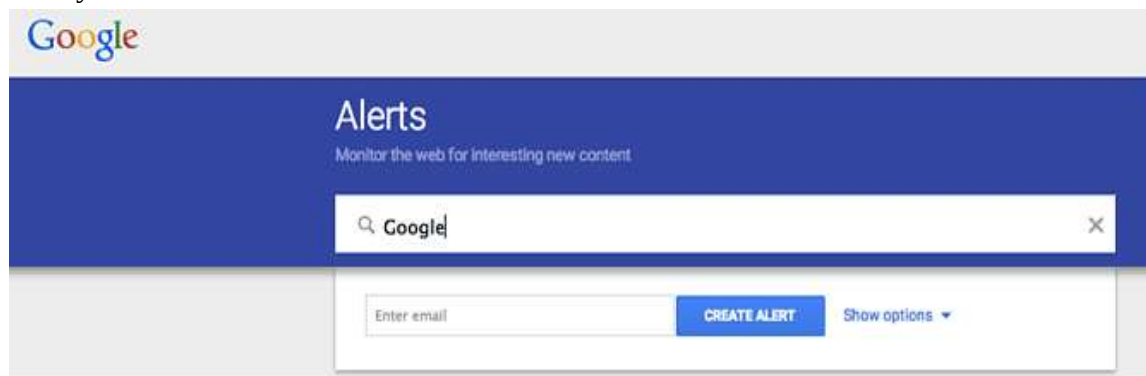
### Sales prospecting tool

The following are tools used in prospecting;

- a) **Google alerts:** You can create a Google alert on the company or clients you are prospecting so that you can get notifications about them when something major like a business decision comes up. This helps in working leads on the prospective customers.

#### How to create Google Alerts;

- i. First, go to Google Alerts (<https://www.google.com/alerts>) and search for your lead.



**Figure 27: Google Alerts**

- ii. Once you type in your term, Google will show you some search results of recent articles and/or Web Pages indexed with those keyword sets or that company's name.

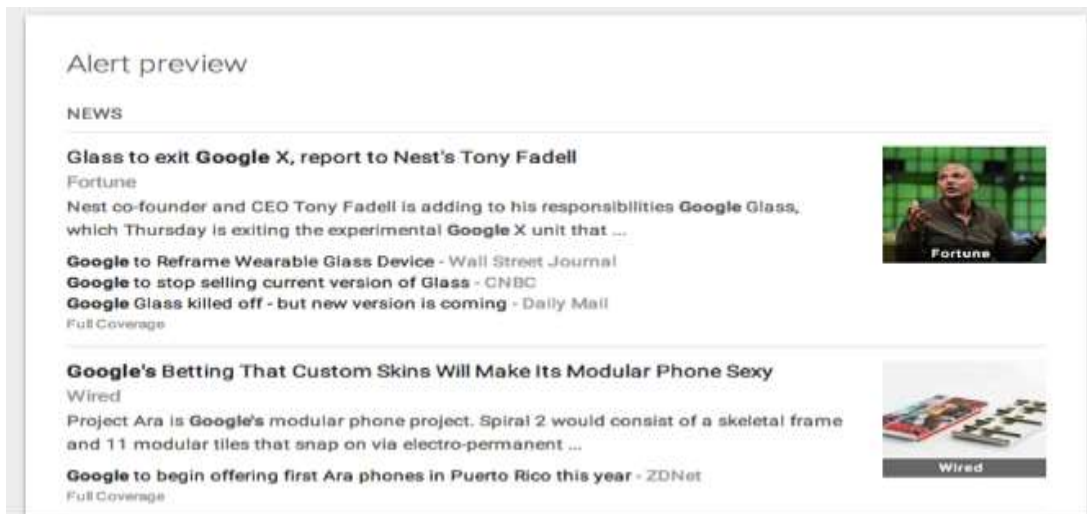


Figure 28: Alert Preview

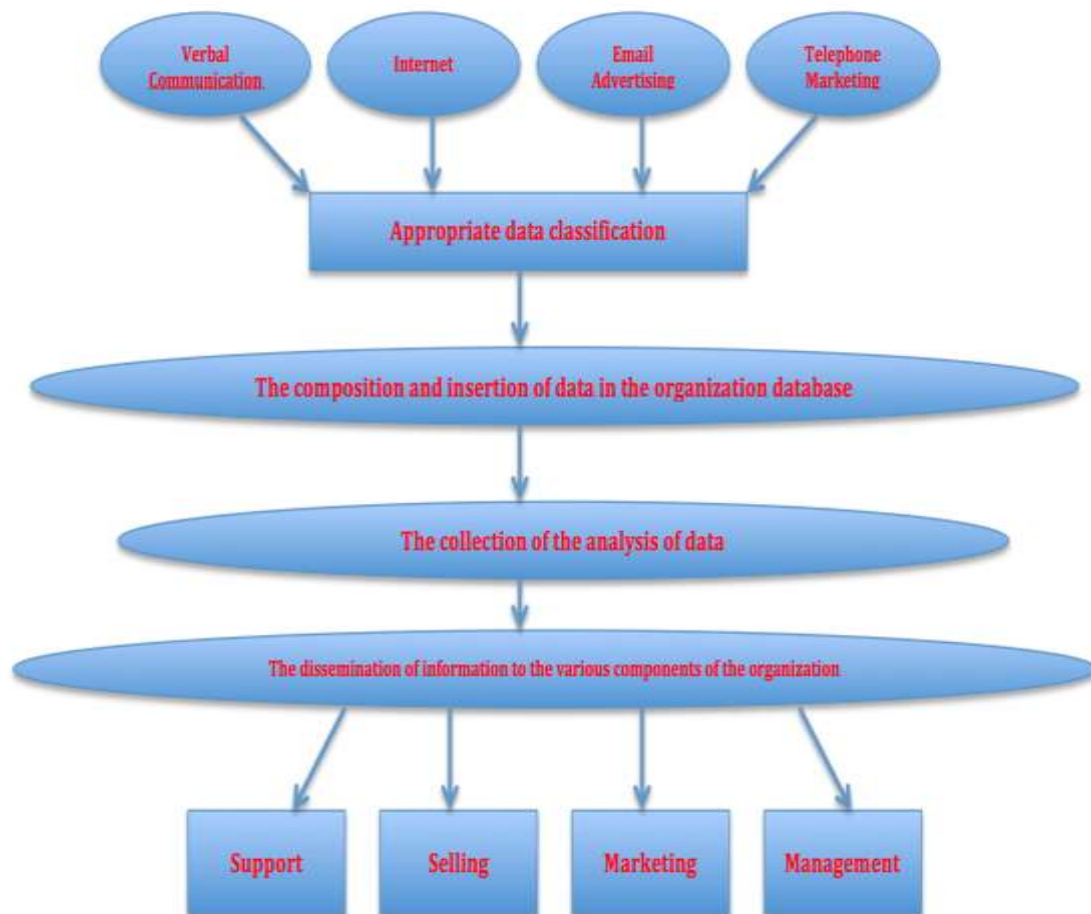
- iii. Then simply enter your email address, and click "Create Alert." That's it!
- iv. Lastly, set up a folder in your email inbox labeled "Google Alerts" and direct all of the alerts to be sent there. This will create a single repository for your alerts so they don't clutter up your inbox.

b) **Sales journals:** Sales journal is a subsidiary ledger used to store detailed sales transactions. Its main purpose is to remove a source of high-volume transactions from the general ledger, thereby streamlining the general ledger. The information trail of the transactions will help in the identification of prospective customers through their transactions. An illustration of a sales journal is shown below:

| 6.1 THE SALES JOURNAL            |             |                |               |       |     |                  |
|----------------------------------|-------------|----------------|---------------|-------|-----|------------------|
| • Format of the Sales Journal... |             |                |               |       |     |                  |
| Sales Journal                    |             |                |               |       |     |                  |
| Date                             | Debtor      | Invoice Number | Cost of Sales | Sales | GST | Debitors Control |
| Feb 1                            | M. Bennett  | 451            | 1400          | 2500  | 250 | 2750             |
| Feb 4                            | A. Griffith |                |               | 0     | 100 | 1100             |
| Feb 17                           | R. Jones    |                |               | 0     | 40  | 440              |
| Feb 24                           | M. Bennett  | 454            | 120           | 200   | 20  | 220              |
| Feb 27                           | R. Jones    | 455            | 200           | 400   | 40  | 440              |
| Feb 28                           | Totals      |                | 2530          | 4500  | 450 | 4950             |

Figure 29: Sales Journal

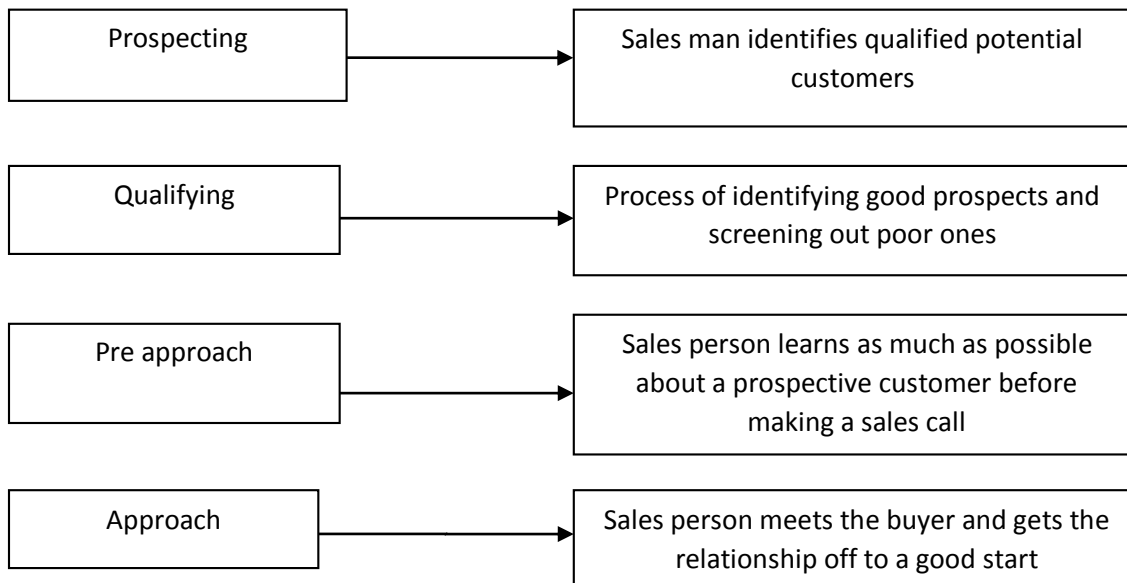
- c) **Customer relationship management:** is an approach to manage a company's interaction with current and potential customers. It uses data analysis about customers' history with a company to improve business relationships with customers, specifically focusing on customer retention and ultimately driving sales growth. The illustration below shows an example of a customer relationship chart:



**Figure 30: Customer Relation Chart**

- d) **Twitter:** Twitter is an interactive online social platform where you can find prospective customers through their posts, bio data and other information provided in their account.
- e) **Quora:** This is also an interactive online social platform much like Twitter. Its platform offers a variety of topics to choose from e.g. marketing, accounting, procurement, art, film etc. One is able to follow conversation trails, as well as, ask questions on the same to get more information on the intended target.

#### Flow chart of the steps on the selling process



**Figure 31: Flow chart Selling Process**

#### Methods of prospecting

1. **Warm calling**

Find common connections as a person, a group, an interest or anything you and your prospects have in common.

2. **Referrals**

This is prospecting through other people that you know, your existing contacts or business partners.

3. **Content marketing.** This is the art of communicating with your customers and prospects without selling. Instead of pitching your products or service, you are delivering info that makes your buyer more intelligent.

4. **Networking**

It takes time to develop a network. Identify your reasons to network. Learn about the people you need to develop relationship with and agree to meet with them.

## 5. Email marketing

Email is free, fast and available to almost everyone. Sharing your business through the email helps customers see how valuable your products or services are.

### Ways of identifying prospective customers

- i) What characteristics does my ideal customer have? Identify key characteristics of your ideal customers
- ii) Who is readily buying something similar
- iii) Will everyone really want to purchase my products
- iv) What do the experts think?
- v) How will I make money from my idea?
- vi) Where will I sell my product or service
- vii) What is my competition doing?

### Questions for assessing a prospect active customer

- a) Does this prospect fit your customer profile?
- b) Does the prospect have the money?
- c) Is the prospects need urgent?
- d) Is the prospect naïve?
- e) Is the prospect responsive?
- f) Does the prospect cherry-pick you after?
- g) Does the prospect want to do things its way?
- h) Do you want the prospect's brand?
- i) Do you and the prospects like each other?

## 1.2 A map of customers based on their location is drawn as per standard operating procedures.

A map of customers based on their locations can be drawn using a customer mapping software. The following are steps on how to develop a customer location map:

### Steps for Development of customer location

- a) **Nail down your buyer persona:** This step considers the understanding of who the customer is. It is important to consider the fact that people have different ways of interacting with a business in different buying stages so it is advisable to differentiate someone who has been doing market research for a while and a person who just needed to buy.

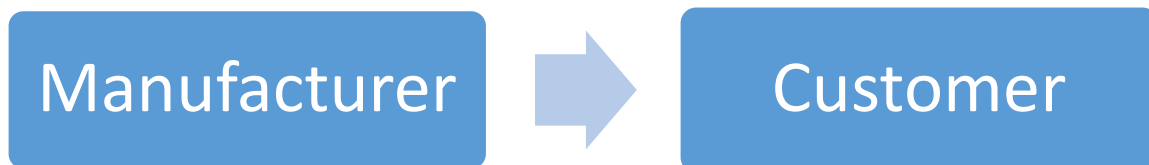
- b) **Understand the goals of the buyer:** Understand the customer's ultimate goals in each phase of purchase after understanding their needs. This can be done through:
  - i. Survey
  - ii. Use of customer analytic tools
  - iii. User feedback
  - iv. Customer questions in each phase of purchase.
- c) **Map out buyer touch points.** A touch point is when the buyer first came into contact or discovered your product, before, during and after they purchased your product.
- d) **Identify customer pain points.** This involves evaluating the quantitative and qualitative data collected and then identifying the main points of the customer journey.
- e) **Prioritize and fix pain points.** After identifying the pain points from a macro perspective, recognize the end goal is not to optimize each step or pain point just for the sake of optimizing it, but so that you can bring your customers one step to converting.
- f) **Update and improve.** You should adapt to your customer changes in taste and preferences and improve your way of operation to accommodate their needs.

### 1.3 Most efficient distribution routes are established based on principles of cost minimization.

The most efficient distribution routes or channels based on various factors like the type of good to be distributed of manufactured, cost of distribution, weight, company policy, government policies on distribution etc.

#### Types of distribution channels

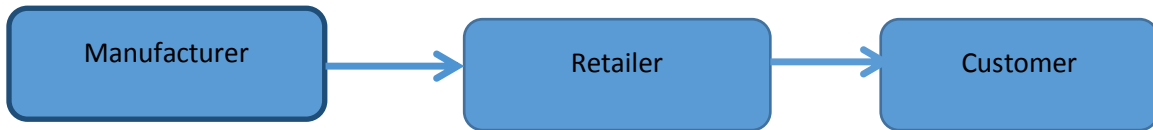
1. **Direct channel or zero-level channel.** (From manufacturer to customer). This doesn't involve the inclusion of an intermediary and the manufacturer gets in direct contact with customers at the point of sale.



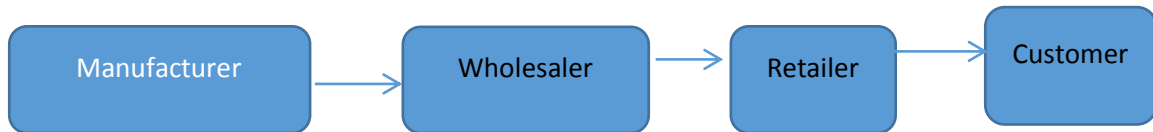
2. **Indirect channels.** (Selling through intermediaries). This involves the intermediaries to sell its products to the end user.

### Classification of indirect channels

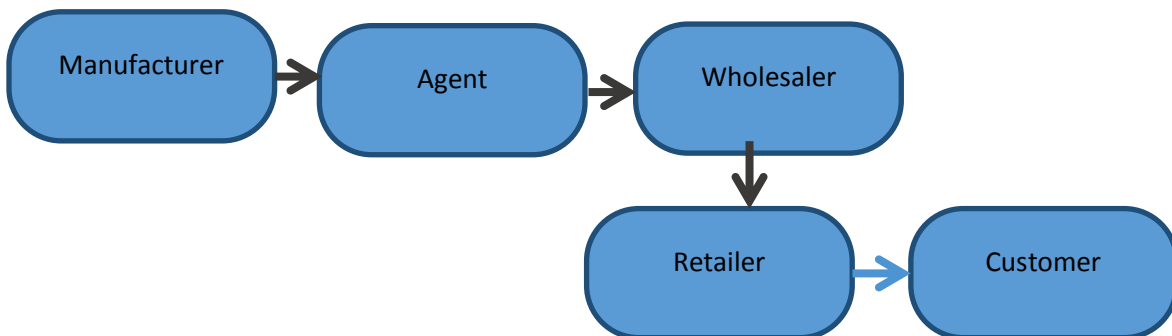
**I.** One-level channel. Manufacturers to retailers to customer.



**II.** Two-level channel. Manufacturer to wholesalers to retailers to customer.



**III.** Three-level channel. Manufacturer to agent to wholesaler to retailers to customer.



### Factors affecting the choice of distribution channel

#### **A. Consideration related to the product.**

##### **i. Unit value of the product**

When the product is very costly, it is best to use small distribution channel. E.g. industrial machinery or gold ornaments are very costly products that is why for their distribution small distribution channels is used.

On the other hand, for less costly products, long distribution channel is used.

##### **ii. Standardized or customized products.**

Standard products are those for which are pre-determined and there has no scope for alteration. E.g. utensils of GOLDBERG. To sell this, long distribution channel is used.

On the other hand, customized products are those which are made according to the discretion of the consumer and there is a scope for alteration e.g. furniture. For such

products face-to-face interactions between the manufacturer and the consumer is essential. Direct sales are opted for in this case.

**iii. Perish ability.**

A manufacturer should choose minimum or no middlemen as channel of distribution for items or product that are highly perishable in nature. On the other hand, long distribution can be selected for durable goods.

**iv. Technical nature.**

If a product is of a technical nature, then it is better to supply it directly to the customer. This will help the user to know the necessary technicalities of the product.

**B. Considerations related to market.**

- i. Number of buyers:** If the number of buyers is larger, then it is better to take the services of the middlemen for the distribution of the goods. On the other hand, the distribution should be done by the manufacturer directly if the number of the buyers is less.
- ii. Types of buyers:** General buyers and industrial buyers. If the good falls under general category, then there can be more middlemen, while for the industrial buyers, there can be less middlemen.
- iii. Buying habits:** A manufacturer should take the services of middlemen if his financial position doesn't permit him to sell goods on credit to those consumers who are in the habit of purchasing goods on credit.
- iv. Size of market:** If the market area of the product is scattered fairly, then the product must take the help of middlemen.

**C. Considerations related to manufacturer/company**

**a) Goodwill.**

Manufacturer's goodwill also affects the selection of the channel of distribution. A manufacturer enjoying good reputation need not depend on the middlemen as he can open his own branches easily.

**b) Desire to control the channel of distribution.**

A manufacturer's ambition to control a channel of distribution affects its selection. Consumers should be approached directly by such type of manufacturer. E.g electronic good sector with a motive to control the service levels provided to the customers at the point of sale are resorting to company owned retail counters.

**c) Financial strength.**

A company which has strong financial base can evolve its own channels. On the other hand, financially weak companies would have to depend upon middlemen.

#### **D. Considerations related to government.**

This also affects selection of channels of distribution e.g. only a license holder can sell medicines in the market according to the law of the government. In this case, only distributors who are licensed will be able to distribute the drugs.

#### **E. Others.**

- **Cost:** A manufacturer should select such a channel of distribution, which is less costly and also useful from other angles.
- **Availability:** Sometimes some other channels of distribution can be selected if the desired one is not available.
- **Possibility of sales:** Such a channel which has a possibility of large sale should be given weight age.

### **Conclusion**

The establishment of goods distribution involves identifying prospective customers, mapping and establishing the most efficient distribution routes. The principles of cost maximization are commonly used to help identify and reduce unnecessary losses hence improving efficiency in distribution of products.

#### **Further Reading**



#### **Read more on the following links**

(<https://contentmarketinginstitute.com/wp-content/uploads/2018/11/map-customer-journey-content-to-sales-journey.png>)

#### **4.3.2.3 Self-Assessment**



#### **Written assessment**

1. Electronic kiosk is one form of;
  - a) Supermarket
  - b) Non-store retailing
  - c) Discount retailers
  - d) Limited retailers
2. The practice of cutting inventories to absolute minimum levels and requiring vendors to deliver the items as they are needed in the production process is known as?
  - a) It's about time (IAT)

- b) Just in time (JIT)
  - c) One more time (OMT)
  - d) Next time in (NTI)
3. This is about maximizing the offerings availability in the market for a customer.
    - a) Availability
    - b) Distribution
    - c) Coverage
    - d) Control
  4. Chicken inn and KFC are good examples of:
    - a) Distributors
    - b) Franchising
    - c) Merchants
    - d) Retailers
  5. These store goods for moderate to long periods.
    - a) Storage warehouses.
    - b) Distribution centers.
    - c) Haulage transport.
    - d) Electronic data interchange.
  6. In international marketing, the most critical distribution is:
    - a) Choice of market-entry methods.
    - b) Choice of international shipping method
    - c) Choice of logistics in foreign markets
    - d) Choice of international shipping method and choice of local logistics in foreign markets
  7. The physical storage of goods waiting to be passed on to the customers is known as:
    - a) audit
    - b) merchandising
    - c) warehousing
    - d) Stock control.
  8. Intermediaries are used in indirect distribution channels. True or False?
  9. Two-level channels involve use movement of goods from manufacturers to retailers to customers. True or False?
  10. State factors that affect distribution channels.
  11. State factors to consider when selecting a good distribution channel.
  12. What are the main attributes of a good distribution channel?

### **Oral Assessment**

1. Intermediaries are used in direct distribution channel. True or False?
2. Mention the types of distribution channels and discuss its pros and cons.

### **Practical Assessment**

1. As a business manager, you have been tasked with the duty of mapping the customer location, what are the steps required?
2. In groups of 5 discuss on how to identify location of prospective customer location and submit your report.
3. During a corporate visit to a company of your choice, carry out analysis and come up with the activities and processes carried out during good distribution in that company and submit a report.

#### **4.3.2.4 Tools, Equipment, Supplies and Materials**

- Stationery
- Classroom and classroom resources
- The Constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Computers

#### **4.3.2.5 References**



Kenneth L. (2006). *Purchasing and supply chain management*. Pearson Education Limited.

Leaders and Pearson, (1992). *Purchasing and supply management*. McGraw-Hill International.

Benton W. (2007). *Purchasing and supply management*. London: Routledge.

### 4.3.3 Learning Outcome No 2: Organize goods distribution logistics

#### 4.3.3.1 Learning Activities

| Learning Outcome No 2: Organize goods distribution logistics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Special Instructions                                                                |  |
| <ul style="list-style-type: none"><li>2.1. Categorize goods to be transported based on their nature, recommended conditions of transport and safety requirements.</li><li>2.2. Modes of transport (rail, road, air, water, carts, pipeline, inter-modal, milk runs, 2 and 3 legged vehicles) are identified based on organizations' resources, quantity of goods, values of goods, nature of goods and cost effectiveness as per workplace policy.</li><li>2.3. Assign means of transport for various goods based on suitability and nature of goods to be distributed.</li><li>2.4. Assign Transport fleet (trucks, pick-ups, cargo planes, tractors) different routes within the distribution channel as per workplace policy.</li><li>2.5. Authorize (work ticket, authority letter, and detail order) movement of transport fleet is as per workplace policy.</li></ul> | Group or individual work may be used and assignments provided for practice purpose. |  |

#### 4.3.3.2 Information Sheet No4/LO2: Organize Goods Distribution Logistics



##### Introduction

This learning outcome will help the trainee cover categorization of goods to be transported, describe mode of transportation such as rail, road, air and water, assigning means of transport as per the nature of goods and authorization of fleet.

##### Definition of key terms

**Modes of Transport:** This describes substantially different ways to perform the transportation of goods and services.

**Transport fleet:** These are groups of vehicles leased or owned by business, government agency or other organization rather than by an individual or family.

**Means of transport:** These are various modes used for transportation of goods and services.

**2.1 Goods to be transported are categorized based on their nature, recommended conditions of transport and safety requirements.**

Goods to be transported are categorized based on their nature, recommended conditions of transport and safety requirements and matched with the appropriate mode of transport. There are various methods means of transportation of goods. Commonly used modes of transport are;

**Modes of transport**

**a) Road transport**

It incorporates transport using roads bound means like Lorries, trucks, vans, tankers etc. It is suitable for transporting durable goods, bulk products, and door to door deliveries especially where the deliveries covered are not long.

**Advantages of road transport**

- i) These are the most common mode of transport. It is cost effective.
- ii) It is appropriate for goods that are required fast.
- iii) It is more economical and quicker over short distances.
- iv) Requires less capital investment as compared to other modes of transport
- v) It is more flexible as it can be able to access even remote areas.
- vi) It has less risk of damaging goods.
- vii) It saves the cost of packaging as the packing process is less complicated.

**Disadvantages of road transport**

- i) It is affected by season or weather; in case of long rain, then it is impossible for goods to move.
- ii) It is prone to accidents and breakdown.
- iii) It is unsuitable for long distance and bulky traffics.
- iv) It is less organized.

**b) Rail transport**

It is one of facilitates transportation by rail e.g. use of trains. It is suitable for transporting bulky and durable goods over long distances; heavy/less value consignment like sand, gravel, cement, grains etc.

**Advantages of rail transport**

- i) It is one of the cheapest modes of transport.
- ii) It is suitable for long distances hauls.
- i. Special wagons (Boogies) can be provided for special cargo e.g. refrigerated wagons for perishables etc.
- ii. It is reliable due to adherence to strict schedules.
- iii. It has a large capacity for transporting loads of related cargo.
- iv. It is suitable for transporting bulky and irregular goods e.g. tractors.

- v. No major limitation on geographical areas

#### **Disadvantages of rail transport**

- i) It is a slow means of transport.
- ii) Rail network is limited to few urban centers.
- iii) It involves heavy capital investment to construct and maintain.
- iv) It is unsuitable for perishable and urgently required cargo.
- v) It requires specialized skills to operate.

#### **c) Water transport**

It encompasses the use of ships, barges, steamers, ocean lines, tankers, cruisers, ferries, canoes and boats. It is suitable for transporting over long distances, bulky goods and irregularly shaped goods. It is also suitable for the transportation of durables and for low value but large cargo.

#### **Advantages of Water transport**

- i. Reliable due to adherence of strict schedules
- ii. It has the largest capacity to transport any quantities.
- iii. It has a global reach since no coastline in all the continents is inaccessible.
- iv. It has relatively low cost of transportation.
- v. It is flexible i.e. the same vessel can carry a variety of items.

#### **Disadvantages of water transport:**

- i. It is the slowest means of transportation.
- ii. There is higher labor since it's labor-intensive.
- iii. There are higher risks for total loss for cargo and goods in case of an accident.
- iv. It is suitable for perishable and urgently required goods.
- v. It is limited to only navigable area/water bodies.

#### **d) Air transport**

It comprises air bound means of transportation like airplanes and helicopters; it is the fastest means and therefore suitable for transportation of perishables and valuable goods.

#### **Advantages of air transport:**

- a. Reliable due to strict time schedules.
- b. It provides the fastest link possible hence offsetting (cancel) the added cost.
- c. It has wide reach and global presence/appeal.
- d. Guarantee of safety and security of cargo is generally higher.
- e. It is suitable for emergency supply like drugs, rescue efforts, humanitarian deliveries, emergencies etc.

**Disadvantages of air transport:**

- i. It is the most expensive mode of transport.
- ii. There are higher risk of total loss of cargo in case of accident.
- iii. It has limited capacity.
- iv. It is unsuitable for flammable, explosive and bulky products.

**e) Pipeline transport**

It comprises underground transportation of liquid and gaseous cargo in pipes. Revolution has made it easier to transport liquids like oil, water and milk in countries at minimum cost.

**Advantages of pipeline transport:**

- i) Limited interference from geographical features
- ii) There are no delays in transporting cargo except in cases of breakdowns.
- iii) It offers flexibility because it's possible to switch from one fluid to another.
- iv) It is cheaper than air and road transport.
- v) It is suitable for long distance haulage.
- vi) There is more security of cargo.
- vii) It is less labor intensive.

**Disadvantages of pipeline transport:**

- a) There is a huge capital outlay required.
- b) It has limited transportation i.e. only liquid and Gas.
- c) It is unsuitable for perishable liquids.
- d) It is subject to sabotage hence risk to cargo.

**Categorizing goods for transportation**

The decision of which means should be used in the transportation of goods is reached based on the nature and type of good to be transported. Hence, it is important to categorize goods before selecting the mode of transportation.

Goods can be categorized based on

- a) Durability
- b) Fragility
- c) The danger it possess to public
- d) Bulkiness
- e) Nature such as liquids or gas

**a) Perishables goods**

These are goods that have little life span such as fruits, flowers, meat products, dairy products, vegetables, pharmaceuticals tomatoes etc. this goods value depreciate due to environmental conditions. Such commodities should be transported by the fastest means

possible such as by air or road in appropriate packaging. While transporting perishable goods one should:

- a. Stored in cool and refrigerated places
- b. Should be handled with care in small batches
- c. Limited exposure to windy and sunny conditions
- d. Requires to be protected from exposure to contaminations.

**a) Fragile**

These are goods that can easily break or shatter. They include glassware, computer screens, television sets, utensils made of glass etc. They should be handled with a lot of care. One should;

- a. Ensure that they are cushioned from shock.
- b. Minimum stacking.
- c. Storage should be close to the entrance for minimum handling.

**b) Hazardous**

These are dangerous items or substances that when transported are a risk to health, safety, property or the environment e.g. petrol, insecticides (gas, powder, liquid) etc.;

- a. Storage under light conditions (enclosures)
- b. Should be away from predisposing conditions.
- c. Should be away from other goods to reduce risks of hazards.

**c) Durables**

These are goods that can go for a long period of time without going bad e.g. knives, furniture etc.

- a. Require large storage space.
- b. Stacking can go up to high as required.
- c. Can be kept in shelves.
- d. Handling can be done with manual or mechanized systems.

**d) Bulky goods**

These are goods that take up more space, large or heavy in nature e.g. cement, sand, vehicles and its parts etc.

- a. Require a large storage space.
- b. Require one level/no stacking.
- c. Handling special due to irregular shape.
- d. Handling equipment. Heavy duty due to weight.
- e. Stored under segregated or open storage spaces.

**e) Ruston/famous goods**

These are goods that unique enough to make people demand more for it e.g. designer clothes, exotic perfumes, limited edition cars etc.

- a. Need to be stored away from moisture/humidity.

- b. Coating can be used during storage to minimize rusting.
- c. Should be stored away from ground.
- d. Water proof should be used.

**f) Liquids**

These are goods that take liquid nature like milk, soda, water etc.;

- a. Require containers to contain the liquid.
- b. Special storage equipment to prevent spillage.
- c. If packed observe stacking requirements.
- d. For consumable liquids observe sanitation e.g. milk
- e. Handling with special equipment.

**g) Solids**

These are goods that take solid nature like pens, books, rubbers etc.

- a. Require storage on containers, shelves, bins etc.
- b. Need to be packaged.

**h) Granular goods**

These are goods that consist of small particles e.g. sand, rice, salt, sugar etc.

- a. Can be packed or exposed e.g. bags or silos.
- b. Storage at ideal conditions e.g. storage in a cool and dry place
- c. Handling only when packaged

Modes of transport used are identified based on an organization's resources, the quantity of goods, values of goods, nature of goods and cost-effectiveness as per workplace. There are various factors that affect the identification of modes of transport or choice of modes of transport to be used having various factors in mind. The following are factors that affect the choice or identification of the appropriate mode of transport:

**Factors affecting the choice of modes of transport**

There are various considerations that one should have when selecting the appropriate mode of transport. Various factors affect the choice of modes of transport. These are:

**The cost of transportation** i.e. air transport is the most expensive but faster as compared to the other modes of transport. It is most appropriate for the transportation of valuable or expensive goods considering given its cost of transportation. It would be costlier to transport goods of low value using air transport.

**The nature of goods to be transported** i.e. if the goods are durable or perishable. The durable goods are transported using air transport since it's the fastest mode to prevent the goods from going bad during transit while durable goods can be transported using water, road or rail transport since they won't go bad due to the slow nature of the mode of transport.

**Availability of the mode or means and its accessibility:** Some goods that need door to door deliveries will employ the use of land or road transportation since most houses are accessible by land or road. Sometimes a mode of transport to be used can depend on its availability in a given region or place e.g. water transport is the logical choice in areas surrounded by water like islands.

**Urgency or speed** i.e. air transport is for urgent items for its speed while water, rail or road is used for goods that not of urgent need because of their slow speed.

**Value of the good being transported** e.g. less value for trains and high value goods for air transport.

### **Government regulations on transportation of goods and services**

Government policies or regulations on the transportation of various unique goods or hazardous goods. Flammable goods are not to be transported by air transport. Petroleum products are to be transported by pipelines and registered tankers from recognized companies.

## **2.3 Means of Transport for various goods are assigned**

Means of transport for various goods is assigned depending on various factors like the nature of goods, cost of transportation, urgency, speed, availability, value of the goods being transported and government regulations etc.

### **Factors to consider while assigning the mode of transport**

- a. The cost of transportation i.e. air transport is the most expensive.
- b. The nature of goods to be transported i.e. perishability or durability
- c. Availability of the mode or means and its accessibility
- d. Urgency or speed i.e. air transport for urgent items for its speed.
- e. Value of the good being transported e.g. less value for trains and high value goods for air transport.
- f. Government regulations on transportation of goods and services

### **Inbound and outbound transportation cost.**

- a. Logistics and supply chain management (SCM) infrastructure depreciation and other related costs, for example, show removal and security devices.
- b. Transportation equipment, for instance, the five basic means of transporting products: air, motor carrier, trains, marine or pipeline; as well as every aspect of vehicle maintenance including fuel costing and oil change.
- c. Technology investment depreciation such as inboard technology and application service provider (GPS)

- d. Logistics and SCM overhead cost
- e. Labor, wages and salaries for drivers and contracts to service providers
- f. Training cost include driver licensing, security training and basic traceability training.

## **2.4 Assigning of transport fleet routes within the distribution channel**

Transport fleet routes are assigned based on suitability of and success of the intended delivery of given goods and services.

### **Routing the transport fleet**

Descartes route execution solution benefit driven capabilities include:

#### **Automated vehicle location (AVL)**

Benefits from GPS based fleet wide visibility with real time status updates. Dynamically linked maps, schedule and assets views provide information on key indicators such as capacity usage, time to service each stop customer time window violations, alternate resources, route profitability and more using GPS based data.

#### **Dispatch**

Effectively coordinate drivers, dispatchers and call centers to streamline operations and enhance customer service. Facilitate assignment of new orders and manage exceptions with robust real time planning tools that utilize the same robust route optimization engine that create the initial route plans.

#### **Turn by turn navigations**

Navigation systems offer multiple benefits to improve the efficiency of mobile workers:

- Reduce miles driven and vehicle maintenance costs.
- Minimizing dependency on dispatch and scheduling.
- Improving customer satisfaction with faster response
- Drivers keeping eyes on the road for safer vehicle operation
- Managing compliance- commercial vehicle restrictions routing

#### **Interactive voice response IVR support**

Take the customer service to the next level by integrating route execution with customer call outs for scheduling information, service exceptions, and post deliveries/ service satisfaction surveys. Workflows can be executed cost effectively with integration of automated IVR solutions to improve and complete a holistic approach to the customers pick up and /or delivery experience.

#### **Discrete route planning solutions benefit driven capabilities include:**

**Strategic delivery planning:** Optimize and build new services, sales/distribution territories and replenishment strategies that maximizes customer service and profit.

**Daily and multi-day route planning:** Basic and advanced features to accelerate your ability to continuously create optimal reliable route using fewer trucks, miles and drivers.

**Reservations:** Enables real time appointment scheduling to make pick-up delivery or service commitments that help keep fleet operations productive and profitable and increase customer satisfaction.

**Sales and merchandiser management:** Benefits from straightforward planning and productivity management for mobile workers (sales, merchandisers and other field personnel)

## **Documents used in transportation of various modes**

### **Different mode of transport uses different documentation**

There are various documents used during transportation of various goods and services in every checkpoint or ports,

### **Documents used in shipping of goods**

Shipping of goods by air or water requires one to provide important transport documents such as:

**Consular invoice:** This is a document certifying a shipment of goods and shows information such as the consignor, consignee, and value.

**Commercial invoice for shipping:** It is a legal document issued by the seller (exporter) to the buyer (importer) in an international transaction and serves as a contract and a proof of sale between the buyer and seller. It's required for customs clearance purposes to calculate and assess the duties and taxes due. The commercial invoice details the price(s), value, and quantity of the goods being sold. It should also include the trade or sale conditions agreed upon by both buyer and seller of the transaction being carried out. It may also be required for payment purposes (such as in the event of payment via Letter of Credit and may need to be produced by the buyer to its bank to instruct the release of funds to the seller for payment).

**Certificate of origin:** This is a document which certifies that a certain product being exported actually originates from the exporting country for the purpose of facilitating trade between countries. The Certificate of Origin is either preferential or ordinary.

**The Preferential Certificate of Origin** is used for exports to the regions where Kenya has a preferential trade agreement such as African Growth and Opportunity Act (AGOA), COMESA, EAC, and European Union (EURO1). KRA currently issues the Preferential

Certificates of Origin” The Chamber is also in the process of automating the Certification process, which will enhance trade facilitation to improve our export position as a Country.

**Ship export declaration:** A Ship Export Declaration is used for two purposes. First, it serves as a census record of exports. Many reports are generated by the government using these statistics. Second, because the commodity’s export license designation appears on the form, the document serves as a regulatory document. This form can be filled out by either you or your freight forwarder (if power of attorney has been recognized).

**Bill of lading:** This is a document used when transporting goods by water transport (ships). It’s a document issued by a carrier to acknowledge receipt of cargo for shipment.

**Inspection certification:** A document certifying that merchandise (such as perishable goods) was in good condition at the time of inspection, usually immediately prior to shipment. Pre-shipment inspection is requirement for importation of goods into many developing countries. When used as a required document under letter of credit terms, the details and identity of the party providing the inspection should be mentioned. If this not done, banks will accept any document appearing on its face to be an inspection certificate issued by any party other than the beneficiary.

**Destination control statement:** It’s a legal statement required by the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR) stating that the goods you are exporting are destined to the country indicated in all the shipping documents.

## **2.5 Authorize movement of transport fleet as per workplace policy**

Transport fleet movement is authorized depending on workplace policy to ensure transport risks are reduced, goods and services are delivered to the right place and on the right time. Workplace policies on transport fleet authorization are always aligned with the government policies on transport and safety requirements:

### **Transport and safety requirements**

A carrier means a corporate body or an individual with operational responsibility over a commercial vehicle on a day to day basis either as registered owner of the vehicle or as a pursuant to a contract or franchise agreement with the registered owner of the vehicle but not include the driver of the vehicle. Commercial vehicle license means a license issued by the authority under the act for the operation of a commercial vehicle. Third party motor vehicle insurance means an insurance policy by that name issued in respect to a public service vehicle pursuant to the provisions of the insurance (motor vehicle third party risk) act. The urban area has the meaning assigned to it under the urban area and cities act.

These regulations shall apply to any commercial vehicle:

- a) Whose weight is more than three thousand and forty-eight kilograms?
- b) Operating on a public road in Kenya.

A carrier shall not operate a commercial vehicle if:

- a) The vehicle does not comply with these regulations
- b) The driver of the commercial vehicle fails or effuses to take any action required to be taken under these regulations.
- c) The cargo transported by the commercial vehicle is not contained, covered, immobilized or secured in accordance with these regulations.
- d) The driver of the commercial vehicle is not licensed to drive commercial vehicle.

A carrier or a driver shall not operate a commercial vehicle without a valid commercial license issued by the authority in accordance with the provisions of regulations.

All commercial vehicles shall be fitted with speed governor that conforms to the Kenyan standard Ks 2295 or approved by the authority.

A commercial vehicle license shall be valid for a period of one year and may be renewed annually.

A carrier or a driver may apply for a commercial vehicle license by submitting an application in the form set out in the first schedule and the application shall be accompanied by:

- a) The prescribed fee as set out in the second schedule
- b) A certificate of registration if the applicant is a cooperative society registered under the security act.
- c) A certificate of incorporation if the applicant is a company incorporated under the companies' act, 2015
- d) A national identity card if the applicant is an individual.
- e) A certificate of registration if the applicant is a society registered under the society Act
- f) A valid insurance cover

A carrier shall be responsible for any damage caused to a public road by spilled cargo that should have been enclosed or covered in accordance with sub-regulations and shall be responsible for the cost of any repairs that may be needed to the public road.

A carrier vehicle shall ensure that a commercial vehicle is parked at least five meters from the edge of the road so as not to block a pedestrian way, obstruct the view or other road users or affect the safe operations of the road.

A carrier shall ensure that every driver of heavy commercial vehicle has completed the daily log sheet for the preceding day before allowing the driver to drive the vehicle.

A carrier shall take out at the minimum third party insurance cover for each of its commercial vehicle.

A person aggrieved by any decision made by the authority under these regulations may within 14 days of being notified of the decision appeal to the Appeals board against the decision.

Any person who contravenes any provision of these regulations commits an offense and shall be liable on conviction to a fine not exceeding twenty thousand or to imprisonment for a term not exceeding six months or both.

### **Conclusion**

The learning outcome covered categorization of goods to be transported, identification of modes of transport to be used, assigning means of transport to be used. Assigning transport fleet different routes and authorizing movement of transport fleet as per workplace will help in efficient and effective movement of goods from the storage to the right customer on the right time hence quality is achieved.

### **Further Reading**



Read more on fleet and route planning from [www.logisticsbureau.com](http://www.logisticsbureau.com)

### **4.3.3.3 Self-Assessment**



#### **Written assessment**

1. An organization's general expression of its overall purpose is known as its?
  - a) Objective
  - b) Vision
  - c) Goal
  - d) Mission
2. Strategy involves?
  - a) Senior manager and board members
  - b) Managers at all levels
  - c) Senior and middle managers
  - d) Senior management
3. Fruits and vegetables are classified as?
  - a) Branded goods
  - b) Luxury goods
  - c) Perishable goods
  - d) Non-perishable goods

4. Term used to express how easy it is to reach a particular place is:
  - a) Durability
  - b) Refer ability
  - c) Accessibility
  - d) Consistency
5. Considering sea transport, GPS stands for?
  - a) Greenwich placement system
  - b) Global placement system
  - c) German placement system
  - d) Global positioning system
6. Consumer products tend to be \_\_\_\_\_ industrial product channels.
  - a) Shorter than
  - b) Longer than
  - c) Identical to
  - d) The same as
7. Which of the following doesn't contribute to price escalation in foreign markets?
  - a) Shipping charges
  - b) Insurance charges
  - c) Product image
  - d) VAT
8. What is a tracking device?
9. Define the term fleet as used in logistics management.
10. Name two examples of tracking devices
11. What are the main attributes of a good vehicle tracking system?
12. What are the merits of a tracking system?

### **Oral Assessment**

1. What does SCM stand for?
2. Name all the modes of transport
3. Name all the nature of goods and preferred modes of transport to use for each.

### **Practical Assessment**

1. Suppose you're a florist and you intend to transport your flowers to another country, suggest the appropriate means of transport its advantages and disadvantages. Explain your answer and submit your work.
2. In groups of five discuss the cost of transportation, problems and suggest possible remedies explaining every case.
3. Assume that you're a manager at a firm in charge of managing the firm's transportation fleet. What are the measures you would undertake to ensure reduced or zero risks in the movement of goods to the market?

#### 4.3.3.4 Tools, Equipment, Supplies and Materials

- Stationery
- Classroom and classroom resources
- The Constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Computers

#### 4.3.3.5 References



Feasons (1992) ‘*Purchasing and materials management*,’ London: Pitman publishers.

Morrison, Alex (1991) ‘*Storage and supply of materials*’ Pitman Publishers

London.Saleemi N.A (1991) ‘*Purchasing and supplies management*’ N.A Saleemy Publishers

#### 4.3.4 Learning Outcome No 3: Track movement of goods

##### 4.3.4.1 Learning Activities

| Learning Outcome No 3:Track movement of goods                                     |                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                            |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                  | Special Instructions                                                                                       |
|                                                                                   | <p>3.1. Fit transport fleet with motor <b>vehicles tracking system</b> (radios, geographical positioning system, cellular tracking, satellite tracking system, wireless system) as per workplace policy.</p> <p>3.2. Monitor transport fleet tracking systems regularly as per workplace policy.</p> <p>3.3. Adhere to predetermined transport channels as per workplace policy.</p> | <p>A case study may be conducted to provide more insight on and assist in carrying out the activities.</p> |

##### 4.3.4.2 Information Sheet No 4/LO3: Track Movement of Goods



###### Introduction

This learning outcome will impact the trainee with skills knowledge and behavior required to fit a transport fleet with motor vehicle tracking system, monitor the transport fleet regularly and adhering to predetermined transport channels as per workplace policy.

###### Definition of key terms

**Vehicle tracking system:** It is a system devised to help keep track or locate the whereabouts of vehicles at any given time during transit or stationery.

**Transport fleet tracking system:** A system devised to pin point or locate the transport fleet during operations.

**Transport channels:** This is defined by how or with what characteristics the information or goods and services is moved from one place to another.

###### Content/procedures/methods/illustrations

**3.1 Transport fleet is fitted with motor *vehicles tracking system* as per workplace policy.**

Vehicles tracking technology has been very popular for a couple of decades. Transport fleet tracking is not used to enhance efficiency and cost saving purposes but also by businesses of any type and size that depend on the use of vehicles to develop their activity and wish to streamline their daily operations.

## **Types of vehicle tracking systems**

Fleet tracking technology needs a hardware component able to collect vehicle data while a software program displays it into tables, maps and reports.

GPS trackers are the most common types of tracking devices. These are installed under the dashboard by means of a 3-wire connection. Inside the tracker, there is a sim card collecting data.

**OBD trackers:** This is a black box that does not require installation. It can be plugged into the OBD II diagnostic port of the vehicle.

**Asset tracker:** These trackers track items that have no power or engine connection such as trailers or mobile devices. They are useful in the construction sector.

Vehicle tracking systems are categorized into two depending on type of data transmission; either active or passive tracking.

### **a) Passive vehicle tracking system**

It is also known as GPS loggers. It gathers data about the vehicle's location and stores it on a hard drive or memory card, which you can then access at a later time.

To use the device, you simply place it on the vehicle. With this, users only have to pay one time upon purchase and installation of the device. Passive tracking system doesn't provide real-time tracking, making it unhelpful in times of emergencies such as road accidents or theft. However, this problem can be easily solved by installing additional models on the vehicle at additional costs.

These additional tools allow the system to track vehicles live, which enables fleet managers to know the vehicle's speed and location at any given time.

### **Pros**

- No need of signals.
- Simple functionality
- No monthly subscriptions.

### **Cons**

- No real-time data
- Hassle
- Lack of precision
- Possible incompatibility.

### **b) Active tracking system**

It collects the same data as passive tracking system but transmits the data in real-time or in real time via cellular or satellite networks to a computer or data center for evaluation. To use the device, you install it in the vehicle. Often this involves plugging it into a port on the car. Then you can subscribe to your mobile phone or computer.

i) Cellular tracking

This kind is the most economical; it uses cellular networks to transmit fleet location information.

ii) Satellite-based tracking

Though the device itself and monthly fee can be expensive, shipping and tracking companies prefer satellite-based tracking because it gives detailed reports and real time updates on company fleets and employees even in places where there is no cell phone coverage. You can track the assets.

**Pros**

- Real time data
- No compatibility
- Convenient
- Legal help can be achieved due to real time data generation.

**Cons**

- Needs subscription. It's expensive
- Signal sensitivity may be a problem depending on the devices signal

**Problems solved by fleet tracking system solve**

- i) **Cost reduction:** the system can save money in a number of ways from reducing administrative time to decreasing global fuel consumption, from checking drivers' position without the need of making phone calls to decrease insurance premiums.
- ii) **Excessive paper work:** the digitalization of fleet documentation can help move to the paperless office and avoid tedious administrative.
- iii) **Getting genuine fleet information:** to know at any moment what is happening drivers and vehicles as there is no way to track some metrics even when using manual methods in order.
- iv) **Checking on vehicle use:** The technology allows to detect improper use as well as detours or allows the implementation of driver identification add-ons to make sure only authorized drivers use fleet vehicles.
- v) **Work organization:** it is possible to plan routes keep track of working hours and job assignments.
- vi) **Automate compliance** allows users to record all information needed for compliance purposes.

### **3.2. Transport fleet tracking systems are monitored regularly as per workplace policy**

Transport fleet tracking systems are monitored regularly as per workplace policy as follows:

#### **Fleet monitoring and control**

Real time information on vehicle, drive and cargo enables transport managers to make better decisions that contribute to business growth and success. The GPS tracking device with the trust track system creates a solution that is suitable for all fleet types and sizes. Tracker can also be used in tracking driver behavior monitoring. This is helpful in keeping the fleet safe and decreasing global fuel consumption. In the event the driver engages in over speeding or harsh braking or idling this can be picked up by the trackers.

#### **Fast and effective fleet management**

Fleet management gives greater control over the fleet resulting in reduced vehicle operating costs and saved employee time. It also enables timely decisions to be made based on accurate data and improves the overall efficiency of the business process.

#### **Secure cargo and passengers.**

Real-time data and alerts enable transport managers to react instantly to critical or unplanned situations and avoid possible financial losses or damage to vehicle, cargo or driver.

#### **Safety and effective vehicle use**

Real time information improves the work efficiency of transport managers and drivers and contributes to overall vehicle safety.

The solution allows vehicle ignitions to be blocked and in the case of theft, vital information can be improved for vehicle recovery.

#### **Vehicle and cargo safety**

Commercial vehicles and the cargoes they carry are expensive assets that can cause serious financial damage to the business if they are not well protected.

##### **a) Cargo security**

Additional door sensors and trailers opening notifications help to protect cargo from unauthorized use by instantly informing the driver and transport manager.

##### **b) Vehicle safety**

Remote ignition blocking and alert buttons prevent a vehicle from being stolen. Different means of driver identification allow those responsible for the vehicle and cargo at a certain time to be determined.

### **c) Perishable cargo protection**

Ensuring the right temperature is essential for perishable goods transportation. With this solution, the temperature sensors can be monitored directly from the refrigerating equipment and temperature sensors can be installed for extra protection.

### **Advantages of vehicle GPS tracking**

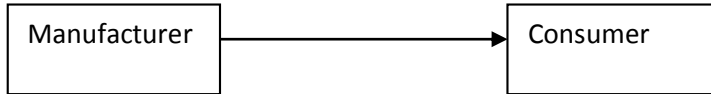
- Advanced GPS business solutions can help you stay updated about the whereabouts of your products. It gives you access to connect with your fleet through a constant 2-way communication.  
In many cases, you have to change the route or pick up something from another destination and the advanced GPS tracking software can help you notify the drivers about the change within a fraction of call to manage its accordingly
- Optimization of the resources  
When you are relaying on different transportation services to deliver your products to your customers, it helps you to clarify the transparency between the drivers and the owners.
- Enhance the performance and drivers' safety  
When you're relying on other transportation services for your business, you will find that the drivers are real back bone of your transportation and security of the drivers.
- High efficiency  
One good thing about the GPS vehicle tracking process is the automation process and the update of real-time location through the internet.
- Direct statistics from the vehicle  
If you don't have a GPS vehicle tracking system designed by a top ranked GPS tracking app Development Company to get the updates of your products, you must be getting it from the employees from the management department, it is tough for the employees to extract statistics without GPS which gives direct live data or direct statistics.
- Cost efficient  
GPS vehicle monitoring is cost effective and you can invest the money in other works.
- Reduced risk of theft  
Modern GPS vehicle tracking apps can be helpful to prevent such incidents in the future. You can set alert for such cases and it will assist you to take proper steps against the robbers timely.
- Top quality customer services.  
GPS vehicle tracking allows you to offer numerous features and it is very fast as well. It also assists the consumers to get an appropriate date of delivery and it is very helpful.

### 3.3 Predetermined transport channels are adhered to as per workplace policy

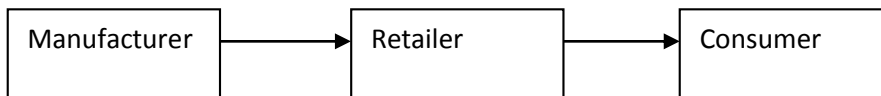
Predetermined transport channels are adhered to using the various classifications of transport channels. The classifications of transport channels are as follows:

#### Types of classification of transport channels

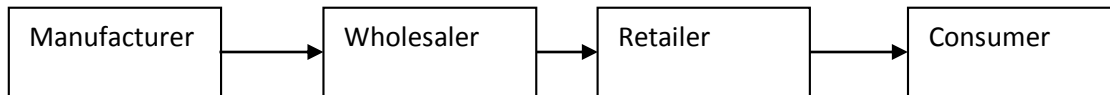
##### a) Zero level channels.



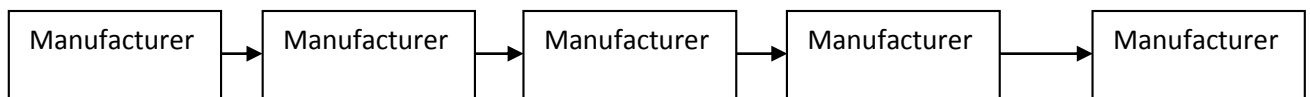
##### b) One level channel



##### c) Two level channel



##### d) Three level channel



The channels are characterized according to the number of channel levels. Each institution that works to bring products to the point of consumption is included.

The number of intermediaries involved in channel operations determines how many levels it operates.

There are four main types of channel levels in consumer markets as shown above.

#### Strategic channel choice

An important consideration when formulating channel policy is the degree of market exposure sought by company choice available includes:

##### a) Intensive distribution

Where products are placed in as many outlets as possible: This is the most common when customers purchase goods frequently e.g. household goods such as detergents or toothpaste.

**b) Selective distribution**

Where products are placed in a more limited number of outlets in defined geographic area: Instead of widespread exposure, selective distribution seeks to show products in the most promising or profitable outlets e.g. high end designer clothes.

**c) Exclusive distribution**

Where products are placed in one outlet in a specific area: This brings about a stronger partnership between seller and re-seller and results in strong bonds of loyalty.

Part of the agreement usually requires the distributor of the company's products e.g. an exclusive franchise to sell a vehicle brand in a specific geographical area in return for which the franchise agrees to supply an appropriate after sale service back up.

**Fuel monitoring and control**

Fuel costs can account for one third of all the fleet operations and costs.

For fleet to be effective and achieve maximum profitability, a continuous fuel monitoring and control solution is a must.

**a) Fuel tank control**

Monitor where, when and how much fuel was filled into the tank.

Make sure that all purchased fuel was inputted into the tank.

**b) Fuel theft protection**

Know where, when and how much fuel was drained from the vehicle and get immediate notifications.

Fuel graphic will help you to identify fuel level; drops are marked red and inform about fuel theft.

**c) Compare drivers**

Rate drivers or vehicles according to their fuel consumption and traveled distances. Set read fuel consumption rates for vehicles.

**d) Reports and analytics**

Analyze fuel level and consumption history to improve fleet management.

Save time and create automatic reports for fuel level and consumption and subscribe them via email.

**e) Instant notifications**

Get instant notifications on fuel draining and re-fueling events via SMS, email or app.

**How it works****Fuel monitoring and control solutions parts**

- i. GPS tracking platform.
- ii. Trust track platform
- iii. Fuel level sensor.

GPS tracking devices collect fuel level and consumption information from vehicle on board computer (CAN bus) or from a fuel level sensor which is installed into the fuel tank. Collected data is transmitted to Trust track platform where the fleet manager can view it and use it to make the right decisions.

## Conclusion

This learning outcome covered how to fit transport fleet with motor vehicle tracking system, monitor transport fleet system and adhere to predetermined transport channels as per workplace policy. This is important in tracking the movements of the goods in transit, hence it also provides quality in terms of accountability and eases workload in terms of supervision.

## Further Reading



Read more on fleet tracking on <https://www.transpoco.com>

Insert image of fleet tracking system (<https://www.transpoo.com>

(<https://www.marketing91.com/distribution-strategies/>) **‘For more content, visit this page’.**

## 4.3.4.3 Self-Assessment



### Written assessment

1. Transportation requires interaction of three groups
  - a) Shippers, carriers and warehouses
  - b) Railroads, truck lines and airlines
  - c) Users, providers and government
  - d) Harbors, terminals and warehouses
2. To maximize profits and remain sustainable, which of the following should not be done?
  - a) Maximize vehicle capacity
  - b) Match vehicle capacity to route demand and required service frequency
  - c) Maximize empty handlings
  - d) Minimize empty mileage
3. How does transportation help to enhance economic value of products?
  - a) By placing goods where they are needed

- b) By adding freight charges to price of the product
  - c) Allowing the producer to ship their product
  - d) Allowing the producer to overcome distances to the market
4. Free on board (FOB) is a common incoterm used in maritime shipments. The buyers-seller terms of FOB are?
    - a) Carriage to be arranged by seller
    - b) Carriage to be arranged by the carrier
    - c) Carriage to be arranged by the buyer
    - d) Carriage and insurance to be arranged by the buyer
  5. Which currency is also referred to as a vehicle currency?
    - a) Euro
    - b) The British Pound
    - c) The US Dollar
    - d) The Japanese Yen
  6. Tariff levels from country affect an organization's \_\_\_\_\_ strategies
    - a) Product
    - b) Pricing
    - c) Processes
    - d) Sales management
  7. Which of the following doesn't contribute to price escalation in foreign markets?
    - a) Shipping charges
    - b) Insurance charges
    - c) Product image
    - d) VAT
  8. What is a fleet?
  9. What is a tracking system?
  10. Name two risks associated with tracking devices?
  11. Name two tracking devices
  12. What is Just-in-time JIT as used in logistics?

### **Oral Assessment**

1. What is the full name of the abbreviation GPS?
2. Explain the need for transport fleet tracking.

### **Practical Assessment**

1. A fleet operator is tasked with the duty of installing a tracking device to the transport fleet. Which is the best tracking devices should he use?
2. Explain your answer and provide examples.

3. As a supply chain manager you're expected to have contingencies in case of emergencies in the supply chain. Come up with a reasonable strategy to counter engine failure of one of the transport fleet carrying cargo for delivery.

#### **4.3.4.4 Tools, Equipment, Supplies and Materials**

- Stationery
- Classroom and classroom resources
- The Constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Computers

#### **4.3.4.5 References**



Bailey, P., Farmer, D., Jessop. (1998), *Purchasing Principles and Management*, 8th ed., London: Pitman Publishing.

Morrison, Alex (1991) “*Storage and Supply of Materials*” London: Pitman Publishers.

Saleemi N.A (1991) “*Purchasing and supplies management*” N.A Saleemi Publishers.

### 4.3.5 Learning Outcome No 4: Oversee Delivery of Goods to Customers

#### 4.3.5.1 Learning Activities

| Learning Outcome No 4: Oversee delivery of goods to customers                     |                                                                                                                                                                                                                                                                                                                                                                            |                                                                                 |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                        | Special Instructions                                                            |
|                                                                                   | <ul style="list-style-type: none"><li>4.1. Supervise distribution staff as per workplace policy.</li><li>4.2. Deliver goods to customers based on clients' terms and conditions of delivery.</li><li>4.3. Endorse delivery notes by the recipient as per workplace policy.</li><li>4.4. Surrender endorsed delivery notes as surrendered as per workplace policy</li></ul> | A role play or an individual assignment may be applied to cover the activities. |

#### 4.3.5.2 Information Sheet No3/LO4: Oversee Delivery of Goods to Customers



##### Introduction

In this learning outcome, trainees will be trained on skills behavior and knowledge of supervising distribution staff, delivering goods to customers, endorsing delivery notes and surrendering endorsed delivery notes according to workplace policy and clients' terms and conditions.

##### Definition of key terms

**Distribution staff:** These are the personnel in charge of movement of goods and services from the source through distribution channel, right up to final consumer.

**Client terms and conditions:** These are rules regulations and acceptable provisions that both the consumer and the supplier have to agree upon for a business exchange to occur.

**Conditions of delivery:** These are conditions that have to be met by both supplies before a delivery of a given commodity is made.

**Endorsed delivery notes:** This is backing or approval of deliver notes. A delivery note is a document that accompanies a delivery or a shipment of goods that lists the description and quantity of the goods delivered.

#### **4.1 Supervise distribution staff as per workplace policy**

Supervision is an ongoing process that involves close monitoring of activities of staff in delivering goods to customers. Various techniques are used in supervision.

##### **Staff Supervision techniques**

###### **a. Delegation**

If you successfully match tasks with people then you can avoid errors, extra time consumption in task completion and loss of quality.

When delegating you need to consider;

- Deadline of the task
- The time employee will take to complete the task
- The interest and inclination of the employee
- Levels of employee
- Support resources

###### **b. Conflict resolution**

Conflict will always be there in any business set up. It is important to resolve conflict in their early stages to avoid serious impact or damage

A supervisor must identify conflicts early so that it can be solved quickly.

###### **c. Evaluation**

It is important to notify the employees on the knowledge of their evaluation based on their performance. Deadlines and appraisals help us to focus on tasks and perform better.

###### **d. Providing constructive criticism**

It is important to criticize the employees but it should be done without impacting negative energy to the employees. This can be achieved by diffusing the criticism with some bits of appreciation.

##### **Key performance indicators of good delivery**

###### **a. Customer Management**

This is having a complete picture of a customer all the way down to the invoice level enables sales to maximize their selling opportunities.

Key points to measure include:

- Delivery efficiency
- Customer order volume and frequency
- Time needed to fulfill back orders
- Average shipping time
- Margin breakdown for individual customer's product lines

- Customer back orders

**b. Delivery real value with KPI**

This involves analyzing the metrics and considering how much effort is needed to evaluate them for your business, the resources required and processes you have to put in place to regularly track and manage these metrics and find the impact on your business.

**c. Financial management**

The business financial health is important in the dynamic world of business to avoid issues like excessive account receivable can affect a distributor's ability to operate effectively; this can be avoided through things like;

- a. Collection time for accounts receivable
- b. Sales and revenue performance
- c. Working capital availability
- d. Gross margin performance
- e. Inventory turn over
- f. Accounts payable turnover
- g. Days sales outstanding

## **4.2 Deliver goods to customers based on clients' terms and conditions of delivery**

Delivery of goods to customers is based on clients' terms and conditions of delivery. This can be achieved through an order fulfillment process.

### **Order fulfillment**

This involves generating filling delivering and serving customers orders. In some cases, it is only through this process the customers interact with the firm, therefore, the order fulfillment process can determine the customer's experience. This is one of the integral activities, carried out by team of experienced logistics practitioners who by stipulation of the organization, follow explicitly defined process as shown below to enhance planning for logistic systems.

**a. Define requirements for order fulfillment**

This includes reviewing the order. Cash cycle understanding the supply capabilities and defining the lead time and the customers service requirements.

**b. Evaluate logistics networks**

If the capabilities cannot support the requirement, the next step is to evaluate the supply chain network to determine if the network could be redesigned to resolve the gaps.

**c. Define plan for order fulfillment**

The next strategic sub process defines the order fulfillment to determine how orders from various customers' will are taken and filled.

**d. Develop framework of metrics**

A framework of matrix must be developed to measure and monitor the performance of the process.

**e. Generate and communicate order**

As we trace and order through the operation order fulfillment process, the first step is to generate and communicate the order. Orders generally come through customer services.

**f. Enter order**

One received the order needs to be entered and edited if necessary. Errors in receiving and entering an order can be very costly. The logistics team should measure and track levels of errors and look for the root causes of the errors. This occurs on the plant floor or in a warehouse and involves picking packing staging and load configurations.

**g. Handle documentation**

Once the order has been processed and planned, the documentation related to that order is prepared including order acknowledge bill of loading picking instructions packing slips and invoice.

**h. Deliver orders**

The final step in the order to delivery process in the arrange delivery of the order. In this process, shipping documents are prepared, the transportation plan is executed, delivery is confirmed and the freight bill is audited and paid.

**Resources for goods delivery**

- a) Proper documentation i.e. avail all legal commercial and transport documents needed for delivery of goods for easy operation
- b) Competent staff to operate efficiently and effectively
- c) Handling equipment's i.e. appropriate and updated for easier loading and offloading perishable and fragile goods
- d) Appropriate means of transport
- e) Proper customer relationship management and supply relationship management
- f) Proper transport and communication system

### 4.3 Delivery note endorsed

A delivery note is a document sent with a shipment of goods that describes the goods and quantities being delivered. It lists what is contained in a packed. It includes the following;

- a. The name and contact details of the seller
- b. Date of issue
- c. Date of delivery
- d. Description of goods
- e. Quantity of each type of goods

#### **Endorsement of a delivery note means the endorser:**

- a. Endorser guarantees that he is the lawful owner of the goods or commodity
  - b. Endorser knows no defect in it
  - c. Has received it in good faith for value received
  - d. Legally capable of transferring it to another party in the normal course of business
- To endorse a delivery note is to confirm approval of its content

#### **Types of documents used in delivery**

- a) **Quotation** –An offer to sell goods and should state clearly the price, details of quality, quantity, terms of trade, delivery terms and payment terms.
- b) **Sale contract**- An agreement between the buyer and seller stipulating every detail of formation.
- c) **Pro forma invoice**-an invoice provided by a supplier prior to the shipment of the merchandise informing the buyer of the kinds and quantities of goods to be sent, their value and importation specifications.
- d) **Commercial invoice**- formal demand notes for payment issued by the exporter to the importer for goods sold under a sales contract.
- e) **Packing list**-a list with detailed packing information of the goods shipped.
- f) **Insurance certificate**- this certifies the shipment has been issued under a given open policy and is to cover loss or damage to the cargo while in transit.
- g) **Bill of lading**- An evidence of contract between the shipper of goods and the carrier.
- h) **Airway bill**- An air consignment note issued by an air flight agent to improve the cargo description and record.

#### **A proper delivery note should reflect the information:**

- Name and contract details of the buyer
- Date of issue
- Date of delivery
- A description of the goods
- Name of the recipient of goods

- A place for signature and customers stamp

When a company orders goods, the supplier usually arranges the transportation of the goods upon doing this, a document called delivery note is created. This document accompanies the shipment. It should show the description of goods, quantity/number of units, the condition of goods carried their colors etc.

In most cases, after the container carrying your stock arrives, the driver will use a delivery note to confirm your company name and receiving manager or anyone responsible for receiving stock in your organization. The receiver of stock will be asked to acknowledge receipt of goods by signing the delivery note or at times, by signing a way bill (official document that travel with a shipment).

### **Types and characteristics of delivery notes;**

*Table 4: Types and characteristics of delivery notes*

| Document type            | Description                                                                                                                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bulk delivery note       | This document provides instruction for delivery of sales order or trip. This document specifies the bulk products and quantities to be delivered to the customer. This document can be used to record additional information about what was delivered. It can also be sued to transfer the ownership of the product to the customer. |
| Bulk Invoice             | This document provides the delivery instructions for the sales order or trip. It specifies the bulk products and quantities to be delivered to the customer. It can be used to record additional information about what was actually delivered.                                                                                      |
| Packaged delivery ticket | This document provides the delivery instruction for sales order. It specifies the packaged products and quantities to be delivered to the customer. It can be used to record additional information about what was actually delivered.                                                                                               |
| Packaged invoice         | This document provides instruction for the sales order and specifies the packaged products and quantities to be delivered to the customer. This document is used to transfer the ownership of the product to the customer.                                                                                                           |

#### **4.4 Endorsed delivery notes surrendered**

The endorsed delivery notes are surrendered in the process of good delivery as follows:

##### **Process of goods delivery**

- a) The ordering person submits the goods acceptance order document to the contractor in an electronic form only, directly from his IT system at least 1 working day before scheduled delivery in a format and by a method specified in the API documentation made available by the contractor or via the customer panel.
- b) Every goods acceptance order shall contain:
  - Unambiguous description and quantity of the goods to be accepted
  - Unambiguous description of the delivery method in accordance with the delivery forms agreed on by parties
  - Unambiguous stated date
  - Additional delivery markings allowing the contractor to identify the delivery easily
  - The deliverer shall have a printed out delivery label or know its number
- c) After reviewing the delivery note the contractor confirms the possibility of unloading the delivery on the indicated date or states the closest possible date of unloading.
- d) The contractor may refuse to confirm the delivery note if due to reasons beyond his control on the suggested deliveries date it is technically impossible to receive a delivery, if on the suggested date there is already another delivery schedule. In such an event the contractor together with the ordering person will agree on the most favorable solutions which will enable the receipt of the delivery on the suggested date or on the closest day possible.
- e) The ordering person and the contractor acknowledge that each electronic acceptance order accepted by the contractor has been submitted by a person authorized by the ordering person to create sub orders and may be processed without any additional agreement based solely on the content of the order.
- f) The ordering person is responsible for the consistency of delivery dates with the delivery dates. The contractor has the right to refuse to uphold a delivery, which was not delivered at the time specified in the delivery note. If the contractor refuses to uphold the delivery not delivered at the specified in the delivery note, the contractor shall not be held liable for any claims.
- g) The contractor undertakes to receive the delivery at the time specified by ordering person in the delivery note. Receipt of the delivery shall be understood as physical unloading of the delivery and preparation of the necessary documents conforming unloading the goods by the contractor.

During unloading, the contractor conducts an initial delivery correctness inspection i.e. verify the delivered quantities against the CRM documents and verify visible damage, access to the content and protection of (seals on the shipping containers).

- h) The process of unloading the delivery is finished when the CMR document is signed and all the comments regarding possible identified discrepancies or circumstances that make full verification impossible no access to content etc have been entered into the document. If any discrepancies in the content of the delivery, its packing etc are identified, the contactor will create photographic documentation of such event and submit it to the ordering person.
- i) The contractor undertakes to accept the delivered goods into stock no later than within two working days from the date of the receipt of the delivery. If the case of deliveries received before 14:00, the contractor will accept the goods no later than the next working day, unless the ordering person decides otherwise (indicates another date) and the accepted goods are not damaged and there are no discrepancies between the goods and the delivery note.
- j) The ordering person undertakes to organize deliveries in such a way that the receipt of the delivery does not cause any additional work for the contractors in particular.
  - Deliveries arrive at the warehouse at the time when it is possible to unload them within normal working hours of the warehouse. The carrier makes goods available for unloading.
  - Deliveries are ready to be unloaded i.e. the goods are in a position to be unloaded and accessing the goods doesn't require any additional activities (e.g. unloading and loading goods not related to the delivery)

If such situations occur, the ordering person will be immediately notified of it by means of adding a referent marking to the order in the WMS system.

iii. Delivered goods are prepared for the safe unloading by the means of the tools available to the warehouse (e.g. the goods are delivered on the pallets with dimensions and weights not exceeding the limits of the warehouse trucks).

- Pallets load shall not exceed 1 ton
  - Goods shall be stocked on EURO pallets
  - Goods on pallets shall be stacked in a stable way and wrapped in such a way as to facilitate immediate unloading with a warehouse truck.
- k) Goods are delivered on vehicles that enable safe unloading of goods (vehicles that can use loading ramps in the warehouse or vehicles equipped with their own lifts). In the case of shipping containers, they should be placed at the end of the semi-trailer to enable easy access.
- l) If the delivery doesn't meet requirements specified in section 10, the contractor has the right to:
  - i. Change the ordering person with additional costs resulting from the need to perform additional operations in order to unload the delivery or if the process of unloading requires operations beyond the normal working hours of the warehouse

- ii. Refuse to unload the delivery if he decides it is impossible to unload the delivery in a safe way compliant with the applicable health and safety regulations and ensuring the safety of the employees or if the lack of possibility to unload the delivery safely results from technical condition of the delivery vehicle.
- m) If the contactor refuses to receive the delivery for reasons directly attributable to the carrier (poor technical conditions on the vehicle or other circumstances dangerous to the contactor's employees), then the photographic documentation of the fact that prevents the unloading and receipt of the delivery will be created and submitted to the ordering person.
- n) During the acceptance of the delivery into stock, the contactor will verify the correctness of the goods against the delivery note present in the WMS system. Verification consists in counting the quantities of the delivered goods.
- o) Upon request of the ordering person, the contactor may perform a detailed verification of all or individual deliveries. Apart from activities described in section 12, it includes:
  - A detailed control of the marking of goods (verifying names, year's etc)
  - Controlling the consistency of the goods with admission to the trading (correctness of attached excise tax labels, Polish descriptions delivered with goods etc)
  - Other activities agreed upon with the ordering person
- p) If the contactor finds any discrepancies between the actual condition and the delivery note, the contactor will immediately inform the ordering person about such a situation via an email sent to the indicated email address or by entering the relevant data into the WMS system.
- q) In the case of any discrepancies between the delivery and the delivery note, the contactor always accepts into the system and into stock the goods and their quantities according to the actual conditions, indicating the discrepancies in the WMS system.
- r) In the event of finding any damage to the delivered products the contactor will every time notify the ordering person by marking the delivery order in the WMS system and will create photographic documentation of the damage to allow the ordering person to make a claim.
- s) If the delivery contains damaged goods, the goods will be accepted into stock as damaged with a reference description of the damage.
- t) The contactor will grant the ordering person access to the full list of damaged goods in the warehouse, with the description of the damage and the system report to facilitate periodic inspection of all damaged goods, with the possibility to export it to a CSV file.
- u) The ordering person defines a reference book of the markings per damaged goods and provides instruction, describing the requirements the goods must meet to belong to a certain type of damage. The reference book is used by the contractor to divide damaged goods in the WMS system according to the type of damage.

- v) Deliveries received on a date different than specified in the delivery note will be accepted at the closest time possible indicated by contractor.
- w) If there are several deliveries awaiting receipts on the same date, the ordering person doesn't have any influence on the order of accepting deliveries. He/she may only mark no more than one delivery as an intervention order, similarly to release orders.
- x) A delivery is considered accepted when the goods appear in the stock and become available for release. The contractor will inform the ordering person about such a situation by entering the relevant information into the WMS system (goods, available for release) and by automatic notification sent to the indicated email address.
- y) At the acceptance of the new (not present in goods in register before) products at the request of the ordering person, the contractor creates the photographic documentation, which is attached to the product in the goods register of WMS system.
- z) Acceptance of goods into the customs warehouse is similar to the acceptance into the trade warehouse, after acquiring the relevant approvals from the customs authorities.
- aa) Transferring of goods between logistics warehouse is conducted after the ordering person creates an order in the system to release goods from the source warehouse and a delivery note for the target warehouse.

The goods in the warehouse must be physically moved; therefore, the same bad time as in the case of deliveries shall apply.

Table 5 an illustration of a delivery note

| <b>DELIVERY NOTE</b>      |  |                     |  |
|---------------------------|--|---------------------|--|
| To:                       |  | Your order name:    |  |
| Address:                  |  | Date sent:          |  |
|                           |  | Per Invoice Number: |  |
|                           |  | Our Contact Person: |  |
| Attention:                |  | Telephone:          |  |
|                           |  |                     |  |
| <b>Quantity Delivered</b> |  | <b>Description</b>  |  |
|                           |  |                     |  |
|                           |  |                     |  |
|                           |  |                     |  |
|                           |  |                     |  |
|                           |  |                     |  |

## Conclusion

This learning outcome covered supervising the distribution staff, delivering goods to customers based on clients' terms and conditions of delivery, endorsing of delivery notes by the recipient as per work place policy and surrendering endorsed delivery notes as per work place policy will make it possible to oversee delivery of goods to customers hence creation of quality in terms on time deliveries, specifications.

## Further Reading



Read more on procurement documents on <https://www.efilecabinet.com>

Policy and procedures for receipting purchased goods <https://www.york.cuny.edu>

## 4.3.5.3 Self-Assessment



### Written assessment

1. To create a delivery via shipping, the following data has to be maintained in R/S system
  - a) The plant data, sales organization, distribution channel, shipping point and division
  - b) The sale and distribution in the material master
  - c) The customer field in the central vendor record, as the vender for shipping is also the customer
2. You can manage the following good movement via shipping
  - a) Stock issue for a delivery
  - b) Stock transfer using stock transport orders
  - c) Return deliveries to vendors
  - d) Return from the customer
  - e) Return for stock transport orders
3. You can post a return delivery via shipping from the following stock types
  - a) Unrestricted use stock
  - b) Quality inspection stock
  - c) Clocked stock
  - d) Goods receipt blocked
4. When goods movement for stock transport orders involve shipping, note the following
  - a) When a goods issue is posted for a delivery, serial numbers are taken from delivery
  - b) When a goods receipt is posted for a delivery, the serial numbers are also taken from the delivery

5. The shipping notification permits more precise planning of the delivery advised by the vendor. In the shipping notification, purchasing can record the following data relevant for goods receipts:
  - a) Delivery date for each of the notified quantities
  - b) Means of transport
  - c) Bill of loading
  - d) EAN/UPC code
  - e) Material number
6. A bill for goods from the seller to the buyer that contains the description of the goods, the address of the buyer and delivery and payment terms is known as
  - a) Bill of lading
  - b) Commercial invoice
  - c) Shippers exports declaration
  - d) Certificate of origin
7. A document that is a receipt for goods delivered to the common carrier for transportation, a contract for the services rendered by the carriers and a document of title is known as a(n):
  - a) Export licenses
  - b) Commercial invoice
  - c) Consular invoice
  - d) Bill of lading
8. Bill of lading is used for air transport. True / false
9. Delivery note contains list of items, quantities and price of the good. True/false
10. Deliveries of goods and services should conform to customer supplier agreement to specifications. True/ false
11. What is the difference between bill of lading and airway bill?
12. What is the meaning of the term documentation?
13. Define the term courier
14. What is the document used for maritime transport?
15. What is a delivery note?

### **Oral Assessment**

1. Discuss the documentation process during goods delivery
2. Explain the various documents used during goods delivery

### **Practical Assessment**

1. Assume that you are a supplier that delivered goods or services to a given customer and you are yet to demand your payment for the services or goods, what are the procedures you would follow and documents you would use?

2. A supply chain manager is tasked the duty of ensuring easy and business transaction without any illegality glitch as well as ensuring proper documentation during goods delivery. What are the key aspects he/she should consider during this assignment? Explain?

#### **4.3.5.4 Tools, Equipment, Supplies and Materials**

- Stationery
- Classroom and classroom resources
- The Constitution of Kenya 2010
- Public Procurement and Asset Disposal Act 2015 and its regulations
- Public Officers Ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Computers

#### **4.3.5.5 References**



Beriton W C. (2007). *Purchasing and supply management*. Routledge, London  
Michael Quayle. (2005). *Purchasing and supply chain management: strategies and realities*. London: Routledge,  
Morrison, Alex (1999). “Storage and supply of materials.” London Pitman publishers,

## **CHAPTER 5: SUPPLY CHAIN OPERATIONS MANAGEMENT/MANAGE SUPPLY CHAIN OPERATIONS**

### **5.1 Introduction**

Supply Chain Operations Management is a unit of competency for TVET level 6 qualification for supply chain. The competencies required in this unit entail managing supply chain operations. The unit involves planning for the procurement department, developing a procurement policy, staffing and supervision of staff, planning, controlling and organizing supply chain operations. The significance of supply chain operations management to TVET level 6 curriculum is to ensure to equip the the students with the knowledge on operational cost reduction, boosting customer service and improving organizational financial position.

The critical aspects of competency in supply chain operations management include demonstrating knowledge of the legal framework and internal policy on procurement and asset disposal. In addition, appropriately disseminating, interpreting and implementing policy to relevant stakeholders; allocating operational resources and duties to procurement staff, establishment of supervision procedures, setting performance target and supervisions procedures, maintaining proper procurement documentation, evaluating and monitoring supply chain operations are also aspects to consider. The basic resources required include computers, stationery, classroom, Procurement and Supply chain regulations and Acts among others. The unit of competency covers five learning outcomes. Each of the learning outcome presents; learning activities that covers supply chain operations management, thus creating an opportunity to demonstrate knowledge and skills in the supply chain operations management and contents in the curriculum. Information sheet provides; defination of key terms, content and illustrations to guide in training. The competency may be assessed through written tests, demonstration, practical asignment and case study. Self assessment is provided at the end of each learning outcomes.

### **5.2 Performance Standard**

Manage supply chain operations by developing organization's procurement and asset disposal policy, planning and organizing supply chain operations, managing procurement staffs, overseeing supply chain operations and controlling supply chain operations in accordance to national policy, organizations requirements and workplace policy.

### **5.3 Learning Outcomes**

#### **5.3.1 List of learning outcomes**

- a. Develop Organizations' Procurement and Asset Disposal Policy
- b. Plan and Organize Supply Chain Operations
- c. Manage Procurement Staff
- d. Oversee Supply Chain Operations
- e. Control Supply Chain Operations

### 5.3.2 Learning Outcome No 1: Develop Organizations' Procurement and Asset Disposal Policy

#### 5.3.2.1 Learning Activities

| Learning Outcome No 1: 1. Develop Organizations' Procurement and Asset Disposal Policy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                    |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|  Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Special Instructions                                               |  |
| <ul style="list-style-type: none"><li>5.1. Interpret legal framework on procurement and disposal of assets.</li><li>5.2. Develop internal procurement and asset disposal policy based on the national policy and organizations requirements.</li><li>5.3. Present internal policy on procurement and disposal of assets to management for approval and adoption.</li><li>5.4. Disseminate the approved policy to relevant stakeholders as per workplace policy.</li><li>5.5. Interpret the policy to stakeholders as per workplace policy.</li><li>5.6. Implement the policy as per legal requirements and workplace policy.</li><li>5.7. Monitor, evaluate and review the implementation of the policy as per workplace policy.</li></ul> | Provide samples of Public Procurement and Asset Disposal Act 2015. |  |

#### 5.3.2.2 Information Sheet No3/LO1: Develop Organizations Procurement and assets Disposal Policy



##### Introduction

This learning outcome provides knowledge and skills for development of organizations' procurement and asset disposal policy. It will equip the trainee with skills and knowledge for interpreting legal framework, developing and presenting internal policy for procurement and disposal of assets. The learners will also train on how to disseminate approved policy, interpreting the policy to the stakeholders, implementation of the policy and monitoring, evaluation and review of the policy.

### Definition of key terms

**Procurement:** Is the act of obtaining or buying goods or services to meet specific needs. It involves purchasing, hiring and leasing; making supplies; logistics and distribution; processing payments; management of contracts; and disposal of obsolete, surplus, unserviceable items.

**P.P.A.D:** This is an acronym for public procurement and assets disposal. Which is a government act enacted by the parliament that provide procedures for efficient public procurement and assets disposal in public entities.

**P.P.A.R.B:** This is denotation for Public Procurement Administrative Review Board. This is a board or group of membership that resolves disputes arising from candidates who claim to have suffered loss or damage from breach of duties imposed on procuring entity by public procurement and disposal assets.

**Asset disposal:** This is the act of selling an asset, long term asset that has depreciated in its usefulness to serve its production potential.

**E-Procurement:** Is the process of procurement using electronic medium such as internet or other information and communication technologies.

**Public Entity:** These are any state agency created by constitution to serve the interest of a country.

### Content/procedures/methods/illustrations

#### 1.1 Legal framework on procurement and disposal of assets is interpreted.

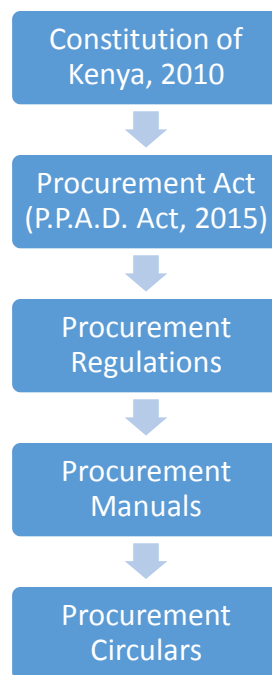
Procurement is a key component in the Public Finance Management System. According to ICPAK, procurement gets allocated 13-20% of the GDP. For survival of any organization, procurement is an important aspect for its growth and sustenance.

Article 201 of the constitution stipulates that public money ought to be used prudently and responsibly while Article 227 of the constitution states that a state organ or any other public entity contracting for goods and services shall do so in a manner that is fair, equitable, competitive and cost effective.

The key law governing procurement in Kenya is the PPAD Act, 2015 (the “Act”) which came in force on the 7<sup>th</sup> day of January, 2015.

In addition, there are regulations, which reinforce and give life to the act.

### Illustration of Public Procurement Legal framework



**Figure 32: Illustration of Public Procurement Legal framework**

#### **1.2 An internal procurement and asset disposal policy is developed based on the national policy and organizations requirements**

An organization's internal procurement and asset policy must be aligned to the procurement laws of the land.

The PPAD Act applies to all state organs, county governments, state corporations, companies owned by public entities and bodies in which the national or county government has a controlling interest, among others.

It is worth noting that the act does not apply to procurement and disposal of assets under the Public Private Partnership Act, 2013 2nd procurement and disposal of assets under bilateral or multilateral governments between the Government of Kenya and any other foreign government, entity, agency unless the regulations dictate otherwise.

Constitutional provisions- Article 10, 201 and 227, the PPAD Act and the relevant Regulations. Failure to comply, the policy shall be deemed to be null and void for its inconsistency.

#### **1.3 Internal policy on procurement and disposal of assets is presented to management for approval and adoption**

An internal policy is enforced within certain technical requirements to ensure the management approves and adopts it. The requirements include:

- a.) Factor the life of the item/ quality of service
- b.) Be environmentally friendly

- c.) Factor in the cost of disposing the item
- d.) Be based on national or international standards, whichever is superior
- e.) Factor in the socio-economic impact of the item
- f.) Conformity to design, functionality, performance and specification
- g.) Factor in the cost of servicing and maintaining the item.

Moreover, to ensure the policy gets the green light to approval and adoption, due diligence must be exercised. This will ensure there is no conflict of interest between the purchasers and vendors, discourage financing vendors through advance payment, ensure there is confidentiality and after the procurement proceedings annually, pre-qualify vendors use system purchase orders (PO's). It will also encourage the procurement staff to consider environmental principles, establish tender threshold that shall contain procurement method and separation of duties, and insist on competitive contracting as the preferred procurement method.

It is crucial to ensure that the policy is periodically reviewed to align to needs and comply with the changes in the law.



Figure 33 Process/Illustration/ procedure in procurement cycle

#### **1.4 Dissemination of the approved policy to relevant stakeholders.**

After closure of the procurement file, an evaluation report is prepared based on the tenders received and ratings given to each tender. The approved policy is accepted by the organization's committee in-charge of procurement.

#### **1.5 The policy is interpreted to stakeholders as per workplace policy.**

After the policy is approved, it is then interpreted by the procurement manager of the organization in conjunction with the procurement committee. They have to ensure that:

- The wording of the policy is precise and articulate.
- The policy complies with the relevant laws.
- The policy is realistic.
- The policy covers the organization's needs.

#### **1.6 The policy is implemented as per legal requirements and workplace policy.**

To effectively implement a procurement policy, the following steps are followed:

##### **Step 1: Consultation**

The procurement manager and procurement committee must consult with all relevant stakeholders.

Every person involved in the procurement process should understand the importance of the organization's policies and procedures and the need for effective implementation.

##### **Step 2: Design the policy**

The policy adopted need to be designed to the needs of the organization.

##### **Step 3: Specify obligations**

The policy should be short and succinct and all procedures spelt out in plain English. In doing so an 'auditable standard' is set and every person at the organization is deemed to understand their obligations in details.

##### **Step 4: Make the policy realistic**

The organization should have the time, resources and personnel to implement the policy.

##### **Step 5: Publicize the policy**

The policy should be in writing for reference. It should also be publicized; this can be achieved by having a policy manual and copies made available to all personnel within the organization.

##### **Step 6: Train all personnel in policy**

Procurement is obligated to provide adequate information, instruction, supervision and training to all personnel within the organization.

##### **Step 7: Be consistent**

Supervise the organization to ensure that the policy is being properly implemented by all personnel. Make frequent follow-ups to ensure compliance with the policy. Any deliberate breaches of policies must be addresses promptly. The manager should lead by example in implementing the policy.

### Step 8: Review the policy regularly

Reviewing the policy regularly ensures standards are improved and sustained. It is important to ensure that policy remains effective and relevant. System to review the policy should be devised. When changes to the policy arise, all personnel should be informed.

### Step 9: Enforce the policy

Right after the policy is implemented, it needs to be enforced in totality.

## 1.7 Implementation of the policy is monitored, evaluated and reviewed as per workplace policy.

Purposes of policy implementation evaluation include:

- Understanding how a policy was implemented
- Enables identification of critical difference between planned and actual implementation
- To identify barriers to and the facilitators of implementation
- Improving the implementation process
- Informing future policy development.

A sound policy implementation evaluation focuses on:

- Components of logic model
- Stakeholder attitudes, knowledge and awareness
- Facilitators of and barriers to implementation.

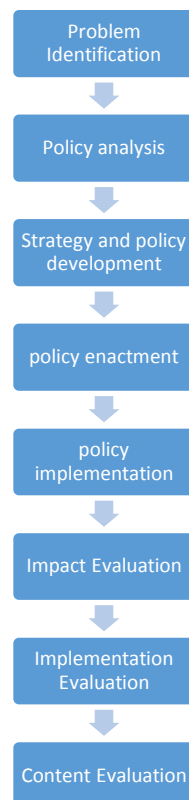


Figure 34 Illustration on evaluation of policy implementation

## Conclusion

This learning outcome covered how to develop organizations' procurement and asset disposal policy by considering legal framework, internal policy, management approval and adoption, interpretation and implementation of the policy, evaluation and review of the policy as per workplace policy.

## Further Reading



[www.ICPAK.com](http://www.ICPAK.com)

## 5.3.2.3 Self-Assessment



### Written assessment

1. Which of the following is not a law within the Procurement and Asset Disposal legal framework?
  - a.) Public Procurement and Asset Disposal Act
  - b.) The Constitution of Kenya 2010
  - c.) Public Finance Management Act.
  - d.) Public Procurement and Asset Proposal Regulations
2. Which of the following is not a regulatory body involved in procurement?
  - a.) Public Procurement Administrative Review Board.
  - b.) National Treasury
  - c.) Public Procurement Regulatory Authority
  - d.) Public Private Partnership Act.
3. PPAD stands for?
  - a.) Public Procurement and Asset Disposal
  - b.) Private Procurement and Asset Disposal
  - c.) Public Procedure and Asset Disposal
  - d.) Private Procedure and Asset Disposal
4. Which one is FALSE about procurement?
  - a.) Procurement involves selling of stock exchange
  - b.) Procurement involves purchasing, hiring and leasing
  - c.) Procurement involves management of contracts
  - d.) Procurement involves processing payments

5. Which of the following entities does PPAD Act apply to?
  - a.) Private companies
  - b.) State corporations
  - c.) Community based organizations
  - d.) Merry-go rounds.
6. Which of the following is TRUE?
  - a.) Procurement involved less than 5% of the GDP
  - b.) Procurement involves selling at of long-term assets that have depreciated and lowered their productivity
  - c.) procurement has no procedures
  - d.) Procurement takes up more than 12% of the GDP.
7. Which of the following is the MAIN law governing procurement in Kenya?
  - a.) PPAD Act
  - b.) PPAD Regulations
  - c.) Public Finance Management Act.
  - d.) Income Act
8. PPAD stands for Public Procurement and Asset Disposal
  - a.) TRUE
  - b.) FALSE
9. Being environmentally friendly is not a factor to consider when seeking approval and adoption of internal policy on procurement and asset disposal
  - a.) TRUE
  - b.) FALSE
10. PPARB stands for Private Procurement Administrative Bonus
  - a.) TRUE
  - b.) FALSE
11. Once a policy is implemented it need not be evaluated
  - a.) TRUE
  - b.) FALSE
12. Which is the main governing law in Procurement and Asset Disposal?
13. Define Asset Disposal.
14. Name 3 factors to be considered when presenting a policy for approval and adoption.
15. What is the purpose of policy implementation evaluation?
16. Illustrate the process of policy implementation evaluation.

### **Oral Assessment**

1. What are the key activities in procurement?

2. PPAD stands for?
3. Name 3 regulatory bodies in public procurement

### **Practical Assessment**

1. Assuming company XYZ has tendered to supply surgical gloves to hospital MDN, describe the procurement procedure.
2. Assuming that company DM has its rights violated in that it was denied to apply for an open tender, to which regulatory body shall they lodge their complaint?

### **5.3.2.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classroom and classroom resources
- Suppliers' manuals.
- Public officers' ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Organizational policy
- Sample procurement documents (Goods received note, Requisition memos, Professional opinion, among others)
- Sample emergency security protocols
- Sample case studies on supply chain operations
- Supply chain court case decisions.
- Public officers' ethics act
- Public Procurement and Asset Disposal Act 2015 and its regulations.

### **5.3.2.5 References**



- Lalonde, Bernard J, & Terance, L. (2014). Problems and Issues in supply chain costing. *The International Journal Of Logistic Management*, 7(1);1-12
- Fearon, H.E (1988), *Purchasing Organizational Relationship*. Springer.
- Lysonns, K and Farrington, B (2006). *Purchasing and Supply Chain Management*, Pearson Education Limited, England. London: Oxford Publishers.
- Benton, W. C Jr (2007). *Purchasing and Supply Management*. McGraw – Hill/Irwin New York, USA

### 5.3.3 Learning Outcome No2: Plan and Organize Supply Chain Operations

#### 5.3.3.1 Learning Activities

| Learning Outcome No 2:Plan and Organize Supply Chain Operations                                                                                                                                                                                                                                                                                                                                                |                     |                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                               | Learning Activities | Special Instructions                                               |
| <p>2.1 Department operational resources are identified and their availability secured as per workplace policy.</p> <p>2.2 Department organizational structure is developed based on activities of the department.</p> <p>2.3 Operational resources are allocated based on the activities of the department.</p> <p>2.4 Procurement staff is allocated duties based on their competence on job description.</p> |                     | Provide samples of Public Procurement and Asset Disposal Act 2015. |

#### 5.3.3.2 Information Sheet No5/LO2: Plan and Organize Supply Chain Operations



##### Introduction

This learning outcome equips the students with knowledge and knowhow on how to plan and organize supply chain operations through identification and availability of departmental operational resources, organizational structure and operational resources allocated based on department activities and finally ensuring procurement staffs are assigned duties based on their competence.

##### Definition of key terms

**Operational resource:** Are the machines, tools, workers, facilities, physical areas or vendors that perform the activities of a project or a production process. They can be of different types and can have different capabilities. Vendor – An external resource that performs project activities or production operations.

**Organizational structure:** An organizational structure is a system that outlines how certain activities are directed in order to achieve the goals of an organization. These activities can include rules, roles, and responsibilities. It also determines how information flows between levels within the company. For example, in a centralized structure, decisions

flow from the top down, while in a decentralized structure, decision-making power is distributed among various levels of the organization.

**Operations:** Operations is the work of managing the inner workings of your business so it runs as efficiently as possible. Whether you make products, sell products, or provide services, every small business owner has to oversee the design and management of behind-the-scenes work.

**Competence:** Is a cluster of related abilities, commitments, knowledge, and skills that enable a person or an organization to act effectively in a job or situation.

Competence indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations. Because each level of responsibility has its own requirements, competence can occur in any period of a person's life or at any stage of his or her career.

## **Content/procedures/methods/illustrations**

### **2.1. Department operational resources are identified and their availability secured as per workplace policy.**

#### **Identification of departmental operational resources**

##### **How are resources identified?**

Resources in an organization can be identified by considering the following:

- **Size of the organization**

The bigger the organization, the more work is involved - and you might need and probably different study methods for a large organization than for a small one.

- **Workforce available**

If you're starting out alone, it makes sense to reach out to others, get them excited about the project, and recruit them to work with you. (Unless your organization is very small, identifying all or most of its assets is a big job for one person).

- **Time allocated**

How much time will be required to conduct a specific task? Is it a day? a week? Or a month?

The more time you have, the more assets you will be able to uncover.

- **Financial resources available**

If available, resources for copying or printing and to support human resources (time) can be helpful.

- **Usage of the resources**

What the resources will be used for also matters most. User departments may come up with the need then the procurement department will take up the responsibility of providing for it.

### **What is the importance of departmental resource identification?**

- They can be used as a foundation for the departmental improvement.
- External resources (e.g., federal and state money) or grants may not be available. Therefore, the resources for change must come from within the department.
- Identifying and mobilizing departmental resources enables the staff members to gain control over their lives.
- Improvement efforts are more effective and longer-lasting, when staff members dedicate their time and talents to changes they desire.
- You can't fully understand the department without identifying its assets. Knowing its strengths makes it easier to understand what kinds of programs or initiatives might be possible to address the department needs.
- When efforts are planned on the strengths of the department, people are likely to feel more positive about them, and to believe they can succeed. It's easier to gain organization support for an effort that emphasizes the positive - "We have the resources within our department to deal with this, and we can do it!" - Than one that stresses how large a problem is and how difficult it is to solve.

### **How are departmental resources secured?**

- **Designated staff time for evaluation**

At the proposal or planning stage, ensuring that staff have time to conduct, participate in or reflect on the results of evaluations as part of organizational learning.

- **Grant funding for evaluation**

Writing evaluation in to grants and / or writing a separate grant to request funding for an evaluation.

- **Working with experts to staff the evaluation**

Collaborate with experts, research institute, or think tank to conduct your evaluation.

- **Institutionalized budget allocation**

Use the rule of thumb approach to estimate the percentage of project funds to spend on evaluation.

- **Leveraging partnerships**

Many projects are undertaken by a consortium of organizations working together. Consider approaching your implementing partners to pool resources and carry out the evaluation.

- **Strategies to reduce costs**

Reducing the costs is an option to consider if evaluation costs outweigh the predicted benefits.

- Operations resources are the machines, tools, workers, facilities, physical areas or vendors that perform the activities of a project or a production process. They can be of different types and can have different capabilities. They include the following:
  - i. **Vendor** – An external resource that performs project activities or production operations. An example is a subcontractor. By linking vendor resources to a vendor account, you can generate purchases for subcontractors, based on the bill of materials (BOM) lines or production lines.
  - ii. **Human resources** – A project or production worker that perform an activity, either alone or as an operator of a tool or a machine. If you're using the Human resources functionality, you can link human resources to a worker. The scheduling engine can then allocate the resources, based on the competencies that are defined for the corresponding worker.
  - iii. **Machine** – A machine or other production equipment that is required in production.
  - iv. **Tool** – An instrument or device that is typically used together with another resource to perform an activity in a project or in production.
  - v. **Location** – A physical location of a specific size that is required in order to perform an activity. An example is an assembly area.
  - vi. **Facility** – A building or fixed structure that is required in order to perform an activity.

## 2.2. Department organizational structure is developed based on the activities of the department.

### What is the purpose of departmental organizational structure?

- **Structure Allows for Better Communication**

Since the flow of information is essential to an organization's success, the organizational structure should be designed to with clear lines of communication in mind. For example, the financial planning and analysis department might report to the Chief Financial Officer and the Senior Vice President of Marketing, because both of these members of the top management team depend on information and reports provided by financial planning.

- **Clear Reporting Relationships**

Reporting relationships must be clear so all members of the organization understand what their responsibilities are and know to whom they are accountable; otherwise, responsibility for a task may fall through the cracks. These clear relationships make it easier for managers to supervise those in lower organization levels. Each employee benefits by knowing whom they can turn to for direction or help. In addition, managers are aware of who is outside the scope of their authority, so they do not overstep their bounds and interfere with another manager's responsibilities.

- **Growth and Expansion**

Companies that grow rapidly are those that make the best use of their resources, including management talent. A sound organization structure ensures that the company has the right people in the right positions. The structure may suggest weak spots or deficiencies in the company's current management team.

As the company grows, the organization structure must evolve with it. Many times more layers of management are created, when one department head has too many individuals reporting to him at one time to give each employee the attention and direction needed for the employee to succeed.

- **Efficient Task Completion**

A well-designed organization structure facilitates the completion of projects. Project managers can better identify the human resources available to them if the scope of each department's responsibility – and each team member's capabilities – is clear. A project to develop a new product would require market research, for instance. The project manager needs to know who in the organization can provide this research, and whose permission must be obtained for the research to be done.

- **Fits Company's Needs**

Companies in different industries require different mixes of talent and a relatively greater emphasis on certain management functions. A software company often has a large development staff, for example. Structuring the reporting relationships within the development team so creativity and productivity are maximized, and deadlines are met, is vital to that type of company's success.

Companies often have to go through a reorganization phase in which individual positions or even whole departments are repositioned on the organization chart in an effort to better utilize the company's human resources and make the operation run more smoothly.

## **Procedure for developing departmental organizational structure based on activities**

### **i) Outline your governance plan**

Determine what type of governance you need to make decisions. Identify the roles in your organization. Typically, an initial steering committee writes the business plan, obtains funding and develops the first proposals. Identify a leader to coordinate, inspire and support the work.

Identify a board of directors to coordinate activities, make contacts, network with other industry leaders and clear the way for the organization to meet its objectives. Small groups tend to require a less formal structure. As the organization grows, the need to explicitly show the hierarchy in an organizational chart helps everyone understand who makes decisions. Formal structures tend to help an organization's members act more quickly.

**ii) Establish Rules for Operation**

Establish rules by stating how formal and informal groups operate within the organization. For example, committees typically use Robert's Rules of Order to conduct meetings. Rules make up an organization's culture.

By documenting operating procedures, you can minimize misunderstandings and confusion, especially if you work in a culturally diverse environment. Groups formed to resolve a single issue may not need a formal structure but large complex organizations typically need clear rules and authority.

**iii) Distribute the Work**

Establish task forces and action committees to carry out activities. These people make specific changes to policies and practices in order to achieve their goals. Define conditions when a temporary support committee, or collection of volunteers, respond to organization's needs. Locate other organizations trying to solve the same problems and learn from their experiences. As you learn more, share your expertise as well.

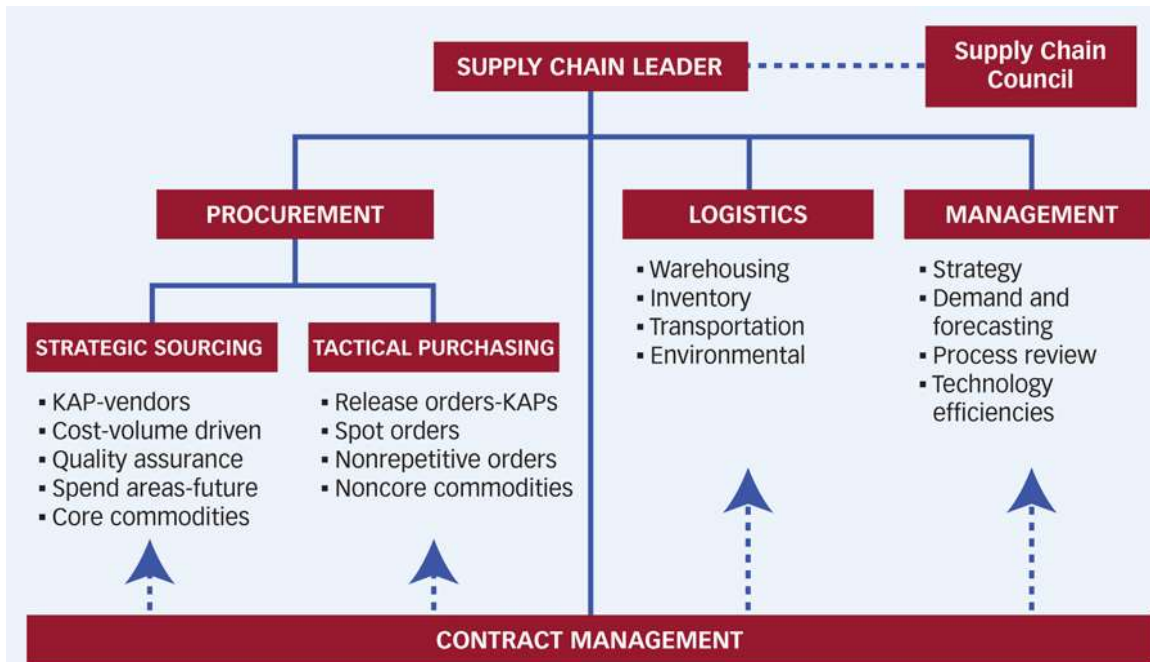
**iv) Allow for changes over time**

Evolve your organizational structure over time. As your organization grows, differentiate your functions into divisions that allow its members to produce products and services. Add divisional leadership to manage the functions necessary to streamline the specific needs of that particular division. For example, as your organization grows, establishing a training function for each division ensures that members of each division receive organizational training and role-specific guidance.

**v) Make communication easy among divisions**

Other divisions typically specialize in product marketing development, marketing and geographic sales. Avoid communication issues by maintaining a matrix management strategy in which members become accountable for divisional and functional success. Reduce communication problems by decentralizing authority. By distributing decision-making throughout the organization, managers at lower levels make decisions faster and tend to be more motivated and responsible.

## Sample of department organizational structure



**Figure 35: Sample of Departmental Organizational Structure**

**Development of supply chain department entails the following concepts:**

**i. Plan**

Every company needs a strategy on how to manage the resources in order to achieve their customers demand for their products and services. The supply chain management is developing a set of metric to monitor the supply chain so that it can deliver high qualities and values to customers.

**ii. Source**

To create their products, companies need to be very careful when choosing suppliers to deliver their goods and services needed. The managers need to develop a set pricing and delivery system in the supply chain. They can also put processes for managing their goods and goods inventory, for example; receiving shipments.

**iii. Make**

In manufacturing the supply chain manager should always schedule the activities that are needed for the production, packaging, testing and preparation for delivery. The most metric-intensive portion of the supply chain, production output and measure levels.

**iv. Deliver**

This part is mainly referred to as logistics by the supply chain management. In this case companies coordinate receipts of orders, pick carriers to get products to customers and develop a network of warehouses.

**v. Return**

In many companies, this is usually where the problem is in the supply chain. The planners should create a flexible and responsible network for receiving a flaw and excess products sent back to them from customers.

**Significance of supply chain department development**

**i. Basic Structure**

In a basic supply chain, the lead company forms a series of relationships with companies that buy and sell supplies from each other. Each company issues and processes purchase orders on demand. There is no integration of supply or quality standards and little collaboration. Although lead companies have access to suppliers, they may face problems caused by fluctuations in supply capacity, delivery reliability or quality.

**ii. Collaboration**

To improve supply chain efficiency, members can agree to increase collaboration. This does not change the organization structure of companies buying and selling to each other, but it creates more formal relationships. Members agree to share production and demand data over a secure network so that each company can plan its operations more efficiently and minimize the risk of supply fluctuations. Members may also decide to harmonize their quality standards to ensure consistency and minimize waste throughout the supply chain.

**iii. Partnership**

As collaboration increases, supply chain members may form an organization structure based on long-term partnerships to stabilize supply arrangements. They replace ad hoc purchase orders with long-term supply contracts and may collaborate on cost-reduction programs. Long-term contracts ensure continuity of supply for the lead company and provide greater stability for other members of the supply chain.

**iv. Tiers**

Companies that depend on certain members of the supply chain for essential supplies, such as critical components or scarce raw materials, set up a tiered structure. Tier 1 suppliers, for example, supply the most important products or services. Companies in lower tiers operate as sub-contractors to tier 1 companies. The relationship between tier 1 suppliers and the lead company are close, with stringent quality and contractual arrangements in place.

**v. Integration**

In an integrated supply chain, the lead company takes formal control of its most important suppliers through mergers or acquisitions. Integration can create a barrier to entry for competitors and reduce costs if suppliers operate efficiently. However, it can also reduce the lead company's flexibility to switch suppliers if problems occur.

### **2.3 Operational resources are allocated based on the activities of the department**

**Resource allocation** is the distribution of resources among competing alternatives in order to minimize total costs or maximize total return. The resources have the following components: a set of resources available in given amounts; a set of jobs to be done, each consuming a specified amount of resources; and a set of costs or returns for each job and resource. The problem is to determine how much of each resource to allocate to each job.

**It involves the following;**

#### **i. Inventory control**

Inventories include raw materials, component parts, work in process, finished goods, packing and packaging materials, and general supplies. The control of inventories, vital to the financial strength of a firm, in general involves deciding at what points in the production system stocks shall be held and what their form and size are to be. As some unit costs increase with inventory size—including storage, obsolescence, deterioration, insurance, investment—and other unit costs decrease with inventory size—including setup or preparation costs, delays because of shortages, and so forth—a good part of inventory management consists of determining optimal purchase or production lot sizes and base stock levels that will balance the opposing cost influences. Another part of the general inventory problem is deciding the levels (reorder points) at which orders for replenishment of inventory is to be initiated.

#### **ii. Linear programming**

Linear programming (LP) refers to a family of mathematical optimization techniques that have proved effective in solving resource allocation problems, particularly those found in industrial production systems. Linear programming methods are algebraic techniques based on a series of equations or inequalities that limit a problem and are used to optimize a mathematical expression called an objective function. The objective function and the constraints placed upon the problem must be deterministic and able to be expressed in linear form. These restrictions limit the number of problems that can be handled directly, but since the introduction of linear programming in the late 1940s, much progress has been made to adapt the method to more complex problems.

#### **iii. Replacement and maintenance**

Replacement problems involve items that degenerate with use or with the passage of time and those that fail after a certain amount of use or time. Items that deteriorate are likely to be large and costly (e.g., machine tools, trucks, ships, and home appliances). Non deteriorating items tend to be small and relatively inexpensive (e.g., light bulbs, vacuum tubes, ink cartridges). The longer a deteriorating item is operated the more maintenance it requires to maintain efficiency. Furthermore, the longer such an item is kept the less is its resale value and the more likely it is to be made obsolete by new equipment. If the item is replaced frequently, however, investment costs increase. Thus the problem is to determine

when to replace such items and how much maintenance (particularly preventive) to perform so that the sum of the operating, maintenance, and investment costs is minimized.

#### **iv. Queuing**

A queue is a waiting line, and queuing involves dealing with items or people in sequence. Thus, a queuing problem consists either of determining what facilities to provide or scheduling the use of them. The cost of providing service and the waiting time of users are minimized. Examples of such problems include determining the number of checkout counters to provide at a supermarket, runways at an airport, parking spaces at a shopping Centre, or tellers in a bank. Many maintenance problems can be treated as queuing problems; items requiring repair are like users of a service. Some inventory problems may also be formulated as queuing problems in which orders are like users and stocks are like service facilities.

### **2.4 Procurement staff is allocated duties based on their competence and job description.**

#### **What is the composition of procurement staff?**

##### **Buyer**

Procuring Buyer is a person who selects a suitable vendor and issues purchasing orders. Buyer prepares a list of potential vendors (the buyer's list) to be submitted to Manager for approval. The buyer's list is critical to identification of the key procurement policies and strategies that state procurement procedures and activities.

- **Procuring Officer**

This role is assigned to a person who directly communicates and negotiates with vendors. The person is responsible for sending the request for proposals (RFPs) to the approved vendors from the buyer's list. Often Officer shares duties of Buyer and submits the buyer's list for approval. Purchasing Officer may act on behalf of Buyer when submitting purchasing orders to approved vendors.

- **Manager**

It is a role of taking supervisory and managerial responsibilities. Procurement Manager leads the work of the purchasing division, including tasks and activities of Purchasing Officer and Buyer. Manager has authorities to make decisions concerning operational activity; however, he or she must communicate with Director to get the strategic, long-term direction of procuring activities (including government activities). Manager closely works with the project manager, and in collaboration, both managers decide on specifications and technical requirements of procurement items required for accomplishing the project.

- **Director**

Purchasing Director is a person who defines the long-term direction of strategic procurement processes and services for the procurement department and is involved in

high-value contract negotiations. Procurement director is responsible for negotiating with the government and bidding on government/business contracts. On behalf of the department this person can participate in official federal bids and tenders by registering in e-procurement systems through the Web. The Director role takes special importance when a project requires concluding of international procurement contracts and agreements.

- **Analyst**

Purchasing analysis is a person who cares for informing upper management of purchasing process status and progress by submitting procurement reports. Purchasing analysis is responsible for tracking spending activity against contracts and non-contracted spending and ensuring procurement best practices and policy compliance.

**What is the criteria/methods used to allocating procurement staff duties what does the procurement officer look at the CV, skills etc**

**i. Work History**

A key aspect of a good interview is to see that the top candidate's work history and experiences align well with what is required of the job. In its "Criteria for Interview" for the procurement officer position, the candidate with the right background and experience learns more quickly and begins performing job duties sooner than someone unprepared. He is also more likely to work alone with success.

**ii. Technical Proficiency**

Procurement officer jobs have some level of technical proficiency that is required for success. These are those specific skills that apply directly to the job and that not everyone possesses. Interviewers often ask questions to understand the experiences candidates have had in performing certain technical job functions or using the technology and tools required for the position. Interviewers look for specific examples of technical experience that apply to the job and would indicate a high potential for success.

**iii. Attitude**

No matter how technically sound a candidate is for a position, a bad attitude or one that would not make for a good fit is a major concern. The Job Interview & Career Guide highlights several considerations with regard to the employee's work attitude, including attitude toward teamwork, stress management, future plans and goals, willingness to learn, motivation and general approach to work and people. Finding someone with the right cultural fit is an important hiring consideration.

**iv. Communication Skills**

Communication skills are one of the most universally sought-after soft skill sets for procurement employees. Thus, many interviewers evaluate the communication skills of interviewees as they answer questions and express ideas. Clarity, thought and articulation are among verbal communication traits you might examine. Additionally, in its "Selection Criteria and Interview Tips," the Job Interview & Career Guide site points out that you can learn a lot about a candidate by observing his body language and nonverbal messages.

**Duties of a procurement staff**

The key elements of the procurement officer's role in the procurement process are to provide support and guidance to the end user/customer in:

- Market analysis and engaging in initial market dialogue, where appropriate.
- Challenging end users' requirements for cost-effectiveness and need, taking account of whole life costs and corporate social responsibility/sustainability issues
- Identifying and engaging other subject matter experts as required (e.g. end user, legal, finance etc.)
- Developing an appropriate output-based specification which is fashioned to attract market interest and stimulate competition and innovation.
- Developing a procurement strategy which requires consideration of existing and/or collaborative contracts.
- Ensuring that all procurement processes (tender, order from framework etc.) Are compliant with relevant legal and policy obligations, advertising through the national portal where appropriate
- Publicizing procurement contact points and making available as much information as suppliers reasonably need to respond to the bidding process.
- Understanding and complying with relevant legal obligations relating to the goods, services or works to be purchased, e.g. Environmental/health and safety legislation
- Ensuring that procurement decisions take account of wider policy requirements.
- Ensuring that procurement decisions are aligned against organizational objectives.
- Ensuring that the organization's policies on corporate social responsibility/sustainability are adhered to.
- Managing the procurement procedure.
- Supporting partnership working arrangements.
- Conducting any procurement clarification required prior to contract award.
- Finalizing the contractual agreement and formal contract documentation.
- Establishing a clear audit trail (including recording the contract on the organization's contract register).
- Notifying the outcome of bids promptly and, within the bounds of commercial confidentiality, debriefing winners and losers on the outcome of the bidding process to facilitate better performance on future occasions.
- Ensuring that adequate contract and supplier management arrangements are in place, supporting supplier management as appropriate.
- Sharing knowledge to develop best practice.
- Handling freedom of information requests on procurement matters in accordance with organizational policy.

## Conclusion

In conclusion, the competencies required in the planning and organizing supply chain operations includes identification and availability of departmental operational resources, organizational structure and operational resources allocated based on department activities and finally ensuring procurement staffs are assigned duties based on their competence.

## Further Reading



Benton, W. C J (2007). Purchasing and Supply Management. New York, NY: McGraw – Hill/Irwin

### 5.3.3.3 Self-Assessment



#### Written assessment

1. The practice of cutting inventories to absolute minimum levels and requiring vendors to deliver the items as they are needed in the production process is known as?
  - a) It's about time (IAT)
  - b) Just in time (JIT)
  - c) One more time (OMT)
  - d) Next time in (NTI)
2. In international marketing, the most critical distribution are:
  - a) Choice of international shipping method.
  - b) Choice of logistics in foreign markets
  - c) Choice of international shipping method and choice of local logistics in foreign markets.
  - d) Choice of market-entry methods
3. This is about maximizing the offerings availability in the market for a customer.
  - a) Availability
  - b) Distribution
  - c) Coverage
  - d) Control
4. Which of the following doesn't contribute to price escalation in foreign markets?
  - a) Shipping charges
  - b) Insurance charges
  - c) Product image

- d) VAT
- 5. An organization's general expression of its overall purpose is known as its?
  - a) Objective
  - b) Vision
  - c) Goal
  - d) Mission
- 6. How does transportation help to enhance economic value of products?
  - a) By placing goods where they are needed
  - b) By adding freight charges to price of the product
  - c) Allowing the producer to ship their product
  - d) Allowing the producer to overcome distances to the market
- 7. Which methods are used in identifying operational resources in a supply chain department
- 8. Explain strategies one can use in securing available resources in a department?
- 9. Describe the criteria one follows to allocate resources in a department?
- 10. Discuss the main importance of allocation of duties and responsibilities to staff?

#### **Oral Assessment**

- 1. What are some of the operational resources in a supply chain department?
- 2. What are the key components to consider when developing departmental structure?
- 3. What duties and responsibility can be allocated to order processing officer in supply chain?

#### **Practical Assessment**

You are the supply chain manager for XYZ Company. The company is still fresh and you have been tasked to ensure efficient operation and increase productivity.

- a) Develop a departmental structure clearly indicating the various positions based on activities to be carried out in the department
- b) Outline some of the resources that are essential in the effective operation of the department
- c) Design job description for the team and prepare a duties and responsibilities allocation for the various personnel in the department
- d) Prepare a chart showing how resources will be allocated in the department.

#### **5.3.3.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classroom and classroom resources
- Suppliers' manuals.

- Public officers' ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Organizational policy
- Sample procurement documents (Goods received note, Requisition memos, Professional opinion, among others)
- Sample emergency security protocols
- Sample case studies on supply chain operations
- Supply chain court case decisions.
- Public officers' ethics act
- Public Procurement and Asset Disposal Act 2015 and its regulations.

#### 5.3.3.5 References



- Fearon, H.E (1988). *Purchasing Organizational Relationship*. New York, NY: McGraw – Hill/Irwin
- Lysonns, K and Farrington, B (2006). *Purchasing and Supply Chain Management*, Pearson Education Limited, England. London: Routledge Publishers.
- Benton, W. C Jr (2007) *Purchasing and Supply Management*. New York, NY: McGraw – Hill/Irwin.

### 5.3.4 Learning Outcome No 3: Manage Procurement Staff

#### 5.3.4.1 Learning Activities

| Learning Outcome No 3: Manage Procurement Staff                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                    |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Special Instructions                                                                                               |
|                                                                                   | <ul style="list-style-type: none"><li>3.1. Induct new procurement staff based on the workplace policy.</li><li>3.2. Set performance targets based on work plan as per workplace policy.</li><li>3.3. Establish supervision procedures as per workplace policy.</li><li>3.4. Measure performance of procurement staff based on set targets and the organizations policy.</li><li>3.5. Maintain procurement staff records as per workplace policy.</li><li>3.6. Monitor staff adherence to standard operating procedures as per workplace policy.</li><li>3.7. Establish procurement staff capacity building program based on the workplace policy.</li><li>3.8. Adhere to code of ethics/work ethics.</li></ul> | <ul style="list-style-type: none"><li>✓ Use procurement manuals</li><li>✓ Conduct individual assessment.</li></ul> |

#### 5.3.4.2 Information Sheet No3/LO3: Manage Procurement Staff



##### Introduction

This learning outcome explains much of management of procurement staff and it equips the students with the knowledge on new staff's induction, setting performance targets, supervision, and establishment of procedures and ensuring that all staffs adhere to code of ethics.

##### Definition of key terms

**Work place policy:** This is a set of principles and rules that aim to guide managers and workers on how to behave in the workplace. They help in avoiding and solving numerous issues like bullying, internet use, health and safety, dress code, office wrangles and many other issues concerned with a workplace set up.

**Performance targets:** these are objective goals set in writing with a particular time limit of achievement for employees, groups or for a particular department and organization itself, for a particular period of business operation.

**Code of Ethics:** this is a guide of principles designed to help professionals conduct business honestly and with integrity. It examines the conduct of business personnel in a business set up and keeps it in check.

### **Content/procedures/methods/illustrations**

#### **3.1. Induct new procurement staff based on the workplace policy**

The main focus of the induction process is to:

- a) Welcome and introduce new staff members to those they shall be working with, main facilities and the physical spread of the organization
- b) Vision, mission and goals and objectives of the procurement department and its history.
- c) Traditions or culture of the procurement department.
- d) The procurement department governance. The management or key administration are introduced.
- e) Main policy document in the procurement department.
- f) Working environment and full motion of procedures, regulations and practices in areas of work.

An introduction is a program used by organizations or business firms to welcome new employees to the company and prepare them for their duties or obligations to the business. Good induction training ensures new starters are trained, and then settled in quickly and happily to a productive role.

Induction training must include the following elements:

- General training relating to the organization, including values and philosophy as well as structure and history etc.
- Mandatory training relating to health and safety and other essential or legal areas.
- Job training relating to what the new starter will be performing.
- Training evaluation entailing confirmation of understanding and feedback about the quality and response to the training.

Training checklist

#### **A. General checklist**

- Essential 'visitor level' safety and emergency procedures
- Washrooms
- Smoking area and policy
- Timings and induction training overview.
- Organizational history and background overview.
- Ethics and philosophy.

- Mission statement(s)
- Organization overview and structure
- Local structure if applicable
- Departmental structure and interfaces
- Site layout
- Dress code
- Basic communication overview
- Facilities and amenities
- Pay
- Absenteeism and lateness
- Holidays
- Sickness
- Health insurance
- Pension
- Trade unions
- Rights and legal issues
- Personnel system and records overview
- Access to personal data
- Time and attendance system
- Security
- Transport and parking
- Discipline procedures
- Multiple intelligence self-assessment
- Health and safety and hazard reporting
- Physical examination, eye test etc.
- Emergency procedures
- Restricted areas, access, passes, etc.

#### **B. Job and Departmental Induction Training Checklist**

Well planned induction training can greatly accelerate the development of the crucial organizational capability:

- Local department amenities, catering, washrooms, etc.
- Local security, time and attendance, sickness, absenteeism, holidays etc.
- Local department structures.
- Department four
- Department functions and aims
- Team and management
- People and personalities overview (extremely helpful, but be careful to avoid sensitive or judgmental issues)
- Related department functions

- Terminology, jargon, glossary, definition of local terms
- Workspace or work stations
- Local housekeeping
- Stationery and supplies
- Job description- duties, authority, scope, area/coverage/territory
- How the job role fits into the service or production process?
- Expectations, standards, current priorities
- Handling and storage
- Technical training
- Product training
- Service training
- Performance reporting
- Performance evaluation
- Initial training plans after induction
- Where to go, who to call, who to ask for help and advice
- Training review times and dates
- Development of personal objective and goals
- Social activities and clubs, etc.
- Use of job specific materials, substances, consumables etc.

Other induction training activities for managerial, field-based or international roles

- Site tour visits
- Field accompaniment visits with similar and related job roles
- Customer visits
- Supplier and manufacturer visits
- Visits and tours of other relevant locations, sites and partners
- Attendance of meetings and project groups
- Shop-floor and 'hands-on' experience (especially for very senior people)
- Attendance of interesting functions, dinners, presentations etc.
- Exhibition visits and stand-manning
- Oversees visits-customer, suppliers, sister companies etc.

**Table 6: Induction Plan**

|                   | Induction training plan (name, date, organization, etc.)  |                                                           |                                                           |                                                           |                                                           |
|-------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
|                   | Mon                                                       | Tue                                                       | Wed                                                       | Thur                                                      | Fri                                                       |
| Am                | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location |
| Notes and actions |                                                           |                                                           |                                                           |                                                           |                                                           |
| Lunch             | Times<br>with whom<br>location                            | Times<br>with whom<br>location                            | Times<br>with whom<br>location                            | Times<br>with whom<br>location                            | Times<br>with whom<br>location                            |
| Pm                | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location | Times<br>activities/<br>subjects<br>with whom<br>location |
| Notes and actions |                                                           |                                                           |                                                           |                                                           |                                                           |

**Table 7: The induction process**

| Activities                                                                                                                                                                                                                                                                           | Key Objectives                                                                                                                                                                                                                                                     | Who                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Day one</li> <li>Report to head of department</li> <li>Introduction to the immediate boss/facilitator</li> <li>Introduction to members of the department in their offices while working</li> <li>Share tea/ lunch with new members</li> </ul> | <ul style="list-style-type: none"> <li>Breaking the ice</li> <li>Help member fit into team.</li> <li>Help member meet those he will rely on to be effective and efficient.</li> <li>Help new member open up and offer his insight that could be tapped.</li> </ul> | <ul style="list-style-type: none"> <li>Head of department.</li> <li>Immediate boss/facilitator</li> </ul> |

## Day two

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                        |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Vision, mission and goals and objective of the procurement department.</li> <li>• Government of the department or organization, council, senate and key administrators</li> <li>• Main policy documents: personnel, financial, procurement.</li> <li>• Physical spread of the premises</li> <li>• Culture, working environment and history of the organization/ company.</li> <li>• Customer care: major customers and their expectations.</li> <li>• Code of conduct of the employees.</li> <li>• Working with immediate boss in his office- go through entire work process.</li> </ul> | <ul style="list-style-type: none"> <li>• Introduce new members to the main values of the department and working environment.</li> <li>• Reduce ‘culture shock’</li> <li>• To see the department of the procurement as a system where team playing is vital.</li> </ul> | <ul style="list-style-type: none"> <li>• Head of department facilitator.</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

### Day three

| Activities                                                                                             | Key objectives                                                                                                                                                                       |                                                                                        |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Working with section heads to have a 'feel of thing'</li> </ul> | <ul style="list-style-type: none"> <li>To understand work carried out by the departments and major players.</li> <li>Meet heads of department to understand what they do.</li> </ul> | <ul style="list-style-type: none"> <li>Head of section</li> <li>facilitator</li> </ul> |

### Day four

|                                                                                                                            |                                                                                         |  |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--|
| <ul style="list-style-type: none"> <li>introduction to heads of the department e.g. managers, team leaders etc.</li> </ul> | <ul style="list-style-type: none"> <li>Meet heads to understand what they do</li> </ul> |  |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--|

### Day five

|                                                                                                                                                                    |                                                                                                    |                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Debriefing sessions with heads of the department.</li> <li>Assignment of duties</li> <li>Copy of service charter</li> </ul> | <ul style="list-style-type: none"> <li>Understand the role of top offices and officers.</li> </ul> | <ul style="list-style-type: none"> <li>Facilitator/ head of department.</li> </ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|

## 3.2. Set performance targets based on work plan as per workplace policy.

### Objectives

#### a) Operational requirement support

Understand business requirements.

Purchase of products and services should be:

- At the right price
- From the right source
- Right specifications that conforms with customer needs
- Right quantity.
- The delivery made at the right place, to the right person and at the right time.

#### b) Management of procurement process and supply base efficiently and effectively

To achieve this, the following steps are followed:

Evaluate and select suppliers based on sound or logical ethical norms and standards:

- All purchases must be approved in accordance with procurement processes and requirements.
- Functional inputs are considered as part of the process.
- Procurement is involved in contractual agreements
- Sourcing teams to be increased accordingly.

Review of specifications

- Requirement for materials and services rendered reviewed.
- Alternatives standardized materials are suggested in order to cut costs of operation
- Categories reviewed periodically.

Purchasing will act as the primary contact with the suppliers

- Methods of awarding contracts are determined.
- New potential suppliers are identified.
- Local business is supported and the social responsibilities too.
- Improvement and development of non-competitive existing suppliers.

Management of internal operations

- Procurement staff is managed
- Provision of procurement leadership in the business or organization
- Definition of procurement structure and strategy
- Policies and processes development and maintenance

c) Development of strong relationships with other groups within the organization.

- Developing strong relationships with internal customers to enable the department gains greater understanding of requirements.
- Sharing of information on market trends, quality, delivery, price, forecast and demand.

d) Supporting of organization goals and objectives

Development of purchasing strategies that support organizational strategies:

- Quality reporting and improved communication
- Key performance indicators that support objectives of the organization is developed.
- Supply options and contingencies that support company plans is developed.
- Supply markets and trends are monitored i.e changes in supply, material price changes and demand trends.

Procurement Key Performance Indicators (KPIs).

Procurement cost avoidance: avoid potential extra costs in the future eg. Extra transport costs, sourcing costs etc.

Supplier availability: measure suppliers' ability to respond to demand i.e. fast or slow

Compliance rate: understand if suppliers fulfill your requirements or not.

Cost reduction: streamline the tangible cost savings.

Number of suppliers: level of dependency on suppliers should be tracked to weigh your options adequately.

Lead time: understand total time required to make an order and the actual delivery based on the order.

### **3.3. Establish supervision procedures as per workplace policy.**

#### **Steps of supervision procedure**

- a) Provide employees with appropriate or relevant tools: employees should be given relevant tools related to their job description for a successful accomplishment of task in hand.
- b) Provide employees with training: employees should be trained for their respective duties or jobs to be well acquainted or comfortable enough to complete tasks.
- c) Help employees in setting goals: helping employees to set their targets or goals helps in improving their performance and focus.
- d) Become a resource: it's important to advise or encourage employees to reach out to you for support i.e. advice, correction, instructions on how to operate some tools or machines, etc.
- e) Hold staff accountable: make sure the employees have opportunities to account for the progress that they made on their set goals.

### **3.4. Measure performance of procurement staff based on set targets and the organizations policy**

Productivity is valued in both organization and the department for indication of progress towards attainment of departmental and organizational goals. The following are the key performance indicators used to measure employee performance.

#### **a) Punctuality**

Punctuality is a vital requirement in employees. Punctuality here refers to the ability of the employee to deliver set targets or tasks within the specified period of time.

Employees that deliver their work late are unlikely to meet set targets of the procurement department as well as the organizational set targets.

#### **b) Work quality**

Employees in the procurement department are required to complete their tasks on time but it's important to be able to deliver quality work that conforms to the required standards of the departments.

Quality work that is at par with the department's standards will ensure attainment of both departmental organizational goals; hence it's a good measure of staff performance.

#### **c) Client feedback**

Conduct a client satisfaction evaluation to gauge their attitude towards work and level of customer service.

This helps in determining whether or not employees are meeting expectations and presenting the company image as well as the department image well.

This is a good measure of the employee performance with the aid of the customer surveys.

**d) Behavioral traits**

Personal habits of employees should be monitored keenly while comparing it against his/her performance.

Bad habits like non-compliance and other bad traits may affect the performance of the employee negatively and also affect those around him/her especially in team or group set up.

This can be avoided or reduced by monitoring the employee in the business or work environment and engaging in corrective session like consultations to understand the employees

**e) Random ad-hoc evaluations**

Randomly checking up on your employee's performance outside of your annual or periodic employee performance measurements practice can also be beneficial in recognizing pain points that need to be addressed to help them raise their performance levels.

**3.5. Maintain procurement staff records as per workplace policy.**

ISO 15489- Documentation and records management

An organization seeking to conform to ISO 15489 needs to have the following in place:

- a) A record management policy whose objectives are creation, maintenance and management of authentic and reliable and accurate records that is capable of supporting business functions and activities. The policy should be endorsed and adopted at the highest decision-making level and should be implemented throughout the organization.
- b) Lead records management responsibility and accountability should be defined and signed to a person with appropriate authority. All employees of the organization are responsible and accountable for keeping accurate and complete records of their activities. Those who create records should ensure that the records they create are captured in the official filing system.
- c) Organizations need to create and maintain authentic and reliable records, and to protect the integrity of those records for as long as required. This include:
  - Ensuring reliable records are created- a reliable record is one whose contents can be trusted as full and accurate representation of transactions and activities on the record
  - Assessing the risks that would result from failure to maintain authoritative records.
  - Preserving records and making them accessible over time in order to meet business requirements.
  - Complying with legal and regulatory requirements and organizational policy

- Ensuring that records are maintained in safe and secure environment
- Safeguarding the integrity of records- this refers to their being complete and unaltered.
- Compliance- records should be managed in accordance with legal and regulatory environment.
- Providing an appropriate storage environment and media that afford records adequate protection.
- Record systems should provide timely and efficient access to retrieval of records needed for business and accountability requirements.

### **3.6. Monitor staff adherence to standard operating procedures as per workplace policy.**

How to implement standard operation procedures;

Standard operating procedures are detailed written instructions that ensure employees work together in synchronization to achieve a particular objective or perform a specific function. The size of your company and procedures will determine how you communicate them to your employees.

#### **A. Evaluate then target audience for these operating procedures.**

If the procedure applies to a small group of people, a group meeting works best; if they apply the entire company and its large company, a mass email or newsletter might get the word out faster.

Alternatively, arrange a meeting with department heads and managers and inform them of the new procedures. Ask them to inform their groups and departments of the new procedures.

#### **B. Be concise**

Explain what the new operating procedures will improve the business and how it will affect the employees e.g. it may take up more of their time or affect how they do their jobs.

#### **C. Arrange training sessions.**

One-on-one sessions can be applied if the procedures are complicated. Its worth putting in the time to make sure that everyone fully understands the new procedures. Tell employees how to follow the procedures, don't ask. Let them know you will be monitoring their ability to implement the procedures. Give them incentives for tacking the new procedures by reminding them that the new procedure will improve their ability to do their job.

#### **D. Feedback**

Ask for feedback on the new procedures. Procedures are implemented to improve an aspect of an operation. Get feedback from those who use the procedures directly since they know its pros and cons to ensure the procedure is effective. Make the instructions are accessible. Publish the procedure on the internal web, send out email reminders and provide a hard copy for employees.

### **3.7. Establish procurement staff capacity building program based on the workplace policy.**

Capacity building is an investment in future sustainability of the financial and governance system of a country.

The objective, focus and timing of the capacity development program need to be an integral part of the country's overall procurement strategy. One of the core issues to be addressed in procurement capacity development is the need for better cooperation and coordination with other relevant public reform processes. This can affect the overall success of procurement capacity development initiation e.g. if the government is decentralizing its operations, the impact on its procurement system will be enormous.

Outsourcing the procurement functions to a private sector provider may also be viable solution, partially when internal capacity constraints are an issue. Because of the important fiduciary responsibilities involved, however, this approach too requires careful monitoring and oversight. It is important to structure the compensation arrangements in final contract for these services so that payments are somehow linked not just to process but also to find outcomes e.g. achievement of 'value of money'

Capacity development program figure below;

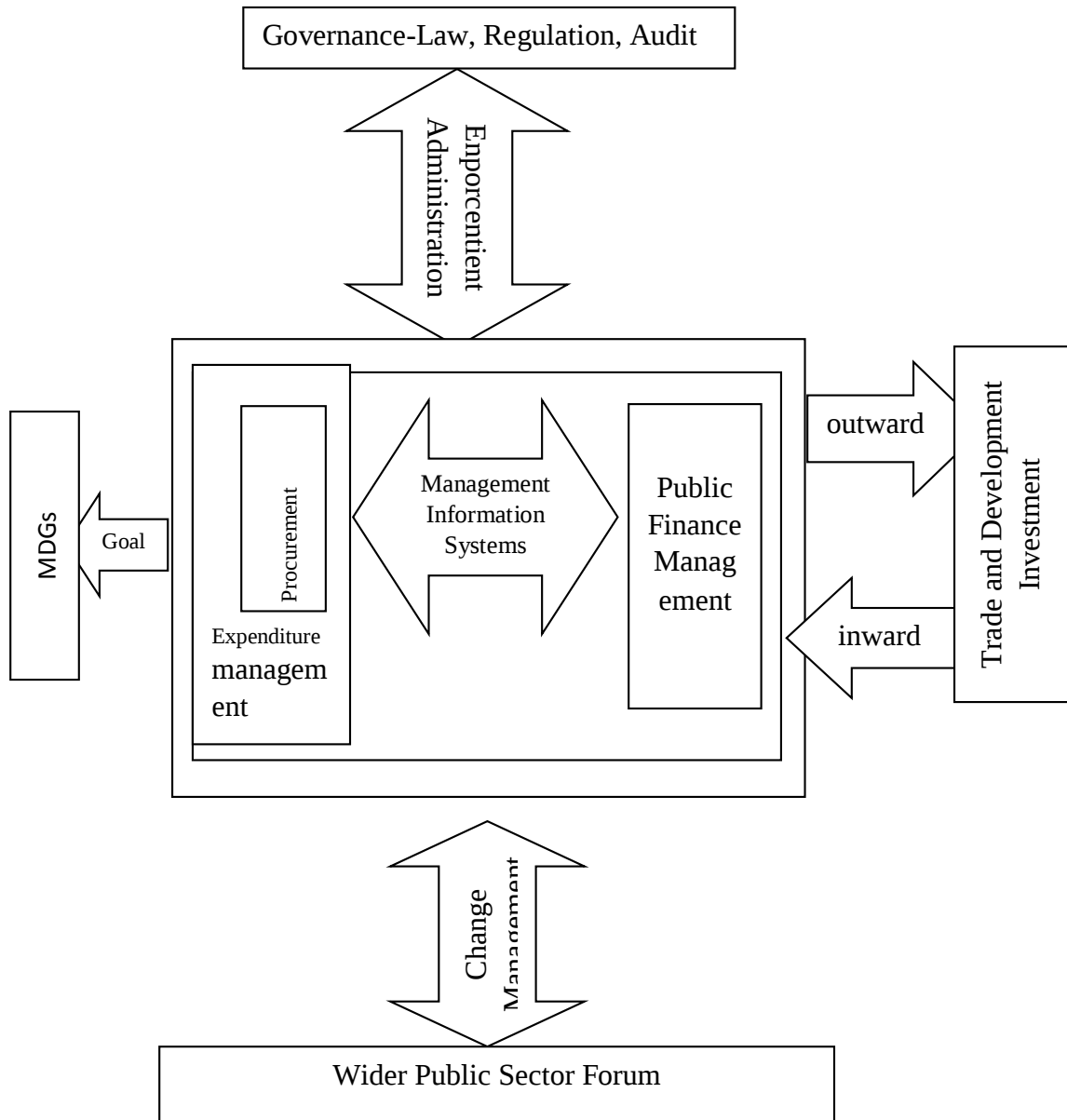


Figure 36: Capacity Development Diagram

### **3.8. Adhere to code of ethics/work ethics.**

Need for code of ethics.

#### **A. Shows employees you are a responsible company**

Code of ethics shows that the company or department is committed to doing business responsibly. It shows the new employees the right way to comply with company's standards and expectations.

#### **B. Provides a clear point of reference when enforcing corrective action**

The code of ethics serves as a reference point for corrective measures and termination of employees who fail to meet these standards. This action helps save the organization or department a great deal of loss due to unwanted traits or behavior.

#### **C. Shows customers you have value for integrity**

Customers always feel reassured by the existence of a code of ethics within a company. They feel the company will operate accordingly when doing business and their integrity is valued by the organization. Third party groups also tend to look more favorably upon organizations that adopt a code of Ethics, appreciating that some attempt is being made to develop a company culture of responsibility and honesty.

#### **D. Prevents 'innocent' violations of ethics**

Codes may not touch on matters of illegality but they do address important matters that affect the profitability, integrity and reputation of a business. Code of ethics outlines the specific standards and expectations of your company for your staff will sensitize employees to things that may not have been obvious to them and avoid inadvertent, yet potentially harmful missteps.

E. A will always benefit on having a proper code of ethics in place both to avoid potential problems and to address problems when they arise.

### **Conclusion**

In conclusion, the learning outcome focused that management of procurement staffs requires new staffs' induction, setting performance targets, establishment of supervision procedures and adhering to code of ethics.

### **Further Reading**



Benton W. C. (2007). Purchasing and Supply Management, London: Routledge.

#### 5.3.4.3 Self-Assessment



##### Written assessment

1. Which of the following is true for supply chain management?
  - a) The physical material moves in the direction of the end of chain
  - b) Flow of cash backwards through the chain
  - c) Exchange of information moves in both the directions
  - d) All of the above
2. The purpose of supply chain management is:
  - a.) Provide customer satisfaction
  - b.) Improve quality of a product
  - c.) Integrating supply and demand management
  - d.) Increase production
3. V.M.I. stands for:
  - a.) Vendor Material Inventory
  - b.) Vendor Managed Inventory
  - c.) Variable material inventory
  - d.) Valuable material inventory
4. The major decision areas in supply chain management are:
  - a) Location, production, distribution, inventory
  - b) Planning, production, distribution, inventory
  - c) Location, production, scheduling, inventory
  - d) Location, production, distribution, marketing
5. Reverse logistics is required because:
  - a.) Goods are defective
  - b.) Goods are unsold
  - c.) The customers simply change their minds
  - d.) All the above
6. 3-PL stands for:
  - a) Three points logistics
  - b) Third party logistics
  - c) Three points location
  - d) None of the above
7. Distribution requirement planning is a system for
  - a.) Inventory management
  - b.) Distribution planning
  - c.) Both 'a' and 'b'
  - d.) None of the above

8. Explain the need for the Code of Ethics
9. What is a procurement staff capacity building?
10. How do you measure staff performance?
11. What are the dangers of not complying with a code of ethics?
12. What is an induction program?

### **Oral Assessment**

1. Explain the need for a procurement plan.
2. Mention some of the contents of a code of ethics
3. What's the process of induction of staff?

### **Practical Assessment**

1. As a procurement head of operations, illustrate on how you would develop and establish staff monitoring process.
2. As a team leader in procurement operations, what advice in accordance with the procurement code of ethics would you give?
3. Assume you're a procurement operations manager and you're advised to establish a staff building program. What are the processes to undertake?

### **5.3.4.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classroom and classroom resources
- Suppliers' manuals.
- Public officers' ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Organizational policy
- Sample procurement documents (Goods received note, Requisition memos, Professional opinion, among others)
- Sample emergency security protocols
- Sample case studies on supply chain operations
- Supply chain court case decisions.
- Public officers' ethics act
- Public Procurement and Asset Disposal Act 2015 and its regulations.

#### 5.3.4.5 References



Arjan, V. (2004). *Purchasing and supply chain management*. PVT Publishers, New Delhi.  
Benton W. C., (2007), *Purchasing and supply management*, London: Routledge..

### 5.3.5 Learning Outcome No 4: Oversee Supply Chain Operations

#### 5.3.5.1 Learning Activities

| Learning Outcome No 4: Oversee Supply Chain Operations                            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                           |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                          | Special Instructions                                                                                                      |
|                                                                                   | <ul style="list-style-type: none"><li>4.1. Provide leadership based on situational needs.</li><li>4.2. Motivate and reprimand Procurement staff based on workplace policy.</li><li>4.3. Adhere to procurement processes and procedures as per workplace policy.</li><li>4.4. Maintain procurement documentation as per workplace policy and legal requirements.</li><li>4.5. Generate procurement reports as per workplace policy.</li></ul> | <ul style="list-style-type: none"><li>✓ Groups of 4-9 assessment</li><li>✓ Provide sample procurement documents</li></ul> |

#### 5.3.5.2 Information Sheet No3/LO4: Oversee Supply Chain Operations



##### Introduction

This learning outcome is intended to equip students with knowledge on how to oversee Supply Chain Operations through proper leadership based on situational needs, staff motivation and reprimand, adherence to procurement processes and procedures, procurement documentation and proper report generation. The outcome will involve details of staff motivational techniques, the steps involved in procurement process and ways of maintain of procurement documents.

##### Definition of key terms

**Leadership:** Is the art of motivating a group of people to act towards achieving a common goal. This involves directing workers and colleagues with a strategy to meet the company's needs.

**Situational needs:** These are needs that are selected to, or possibly the result of the buyer's specific environment, time and place.

**Procurement Staff:** These are employees who work in many types of public and private organizations where they process purchasing transaction of services, equipment, stationery and other goods

**Motivation:** Motivation is the reason for people's action willingness and goals, an individual's motivation may be inspired by others or events (extrinsic motivation) or may come from the individual (intrinsic motivation).

**Reprimand-** is a severe reproof or rebuke, especially a formal one by a person in authority. This means to censure, criticize or find fault with someone for behavior deemed comprehensible.

**Procurement reports:** This procurement allows an organization to demonstrate how its procurement activities deliver value for money, contribute to the realization of the broader goals and objectives and provide a panoramic snapshot of the effectiveness of procurement strategy.

## Content/procedures/methods/illustrations

### 4.1. Leadership is provided based on situational needs.

#### Leadership skills

Leadership skills are the tools, behaviors and capabilities a person possesses in order to be successful in motivating and directing others. True leadership skills involve something more; the ability to help people grow in their own ability.

#### Qualities of good leadership

- Demonstrate integrity
- Set an example
- Willing to take risks
- Helps in problems solving
- Understands how to motivate the behavior

#### Importance of leadership skills

- Effective communication
- Problem solving
- Relationship building
- Striving for feedback

### Leadership skills are required for overseeing supply chain operations

#### Global orientation

Global sourcing and global supply chains have expanded tremendously in recent years, for both retailers and manufacturers. There are few companies that do not either source globally, sell globally, or have competitors that do so. Therefore, supply chain executives must manage, like never before, an enterprise that extends across continents and must deal effectively with suppliers and customers worldwide.

### **Systems Thinker**

The supply chain executive must also comprehend the connections and interdependencies across procurement, logistics, manufacturing, and marketing/sales. In addition, he or she must absorb the complexity of interfaces with suppliers and customers outside of the firm.

### **Inspiring and Influential Leadership**

A small but growing number of today's supply chain leaders are front-and-center within the organization. They must be able to foster close interpersonal relationships that build credibility for them and for the supply chain function across the organization. They must be able to build teams and manage people, and must be able to communicate their message compellingly to multiple stakeholders.

### **Technical Savvy**

The supply chain chief need not be credentialed in IT systems, but he or she must have a close working relationship with the CIO and ideally have no shortage of IT-savvy specialists on staff. He or she should have dealt with the challenges of technology selection, implementation and application, and be alert to the next-generation of technology tools, as well as being wise to the implementation challenges inherent in the complexity of today's supply chain software solutions.

### **Superior Business Skills**

Supply chain leaders must be able to speak the language of senior executives as easily as they can talk about fleet-truck efficiencies or demand forecasting. Terms such as EBITDA, ROIC, and economic profit should be part of their everyday parlance, and supply chain leaders should be as comfortable discussing cash flow with the treasurer's office as they are with talking about delivery schedules with suppliers.

## **4.2. Procurement staff is motivated and reprimanded based on workplace policy**

### **1. Staff motivation techniques**

**The following are staff motivation techniques that employees can use;**

- a) Give the employees purpose -Motivate employees by giving a purpose to understand the vision better.
- b) Create positive work Environment-Motivate employees by offering an upbeat positive work environment .it encourages teamwork and ideas sharing, and make sure the employees have the necessary tools and knowledge to perform well.
- c) Set goals that are reasonable and achievable. - The employees become self-motivated by helping establish professional goals and objective.

- d) Providing incentives- Increase motivation by providing incentives to work towards. You can create individual incentives to each employee or team incentives to motivate employees as a group.
- e) Recognize achievements and accomplishments- Celebrate employees' achievements through employee of the month or star performance awards.
- f) Share profits to improve performance - Motivate employees by with the incentives of a profit sharing programs. In this way the employees increase earning while helping the business income rise.
- g) Solicit employees input- Regularly survey employees' satisfaction and hire an independent party to conduct a formal focus group.

### **Reprimand of employees**

An employee reprimand is an official written method of documenting that you have warned an employee about a specific lack of performance.

The employee reprimand is provided following the failure of informal and formal supervisory coaching to help the employee improve the kind of required performance.

### **The purposes of procurement employee reprimand**

- i. To get an employee attention
- ii. It notifies them that failing to improve their performance may result in more disciplinary action

#### **A. Creation of paper reprimand one should trail that will lead up to the reprimand. One should;**

- Document every correction action one takes with the staff
- Ensure that verbal feedback sessions are being encouraged by the employee with a written endorsement
- Write the action in an employee record
- Performance reviews are acceptable forms of historical behavior for reprimand

#### **B. Improve the performance**

The staff will generally not cause managers and leadership to pull out the employee hand book and point out violations. They will not normally intend to fail at the task they are given.

#### **C. Follow the established policies**

In keeping with the policies outlined in the employee hand book or acceptable behavior letter, an employee reprimand maybe the only step required before the employee termination.

## **A sample of reprimand letter**

Name of Employer.....  
Name of Company or Business .....  
Address of Business.....  
City, State, Zip Code.....

DATE.....

Name of Employee.....  
Position of Employee in the Business.....  
Address of Employee.....  
City, State, Zip Code.....

RE: Formal Reprimand Letter

Dear Name of Employee:.....

This letter is to serve as an official written reprimand for an incident that happened on [DATE]. On this said date, you were one hour late to work and violated company policy. You had no written reason for being late and advised your supervisor that you overslept.

This is to serve as a written warning, as you have already been giving a verbal warning in the past two weeks. We expect all employees to come to work on time and to be ready to work.

We value attendance and consider it to be a significant factor in your position. Our goal is to service our customers with quick and effective service, and your attendance problems are not acceptable. Because we are an installation company, we had to rearrange our route for the day to accommodate your tardiness.

Because of your late arrival to work, we had to have someone else step in and cover routes to make up for the missed service call. We tried to call you several times to no avail, and we were not even sure you were going to show up for the day.

Our employees must be dependable, as our customers depend on their prompt arrival to their schedule appointments. This is a disservice to our customers and to the employees who are covering for you. The employee that covered for you on both occasions is now into overtime hours.

This is not the first time that we have had this issue with you being tardy. Absenteeism was a problem in the recent past and it seems that the verbal counseling has not been

effective. Consequently, this will be the only further notice you will receive regarding this matter. Proper attendance and being on time is necessary for the overall functioning.

Please sign and date below, as a copy will be placed in your personnel file.

Signature of Employer.....  
Printed Name of Employer.....  
Name of Company or Business.....

#### **4.3. Procurement processes and procedures are adhered to as per workplace policy.**

##### **Procurement processes**

It's the process that is essential to get products, services from requisition to purchase order and invoice approval.

The procurement process varies by organization's content and operation

Every procurement management process consists of 3ps namely;

- Process
- People
- Paper

##### **Steps involved in a procurement process**

Every procurement management process involves several elements including requirement determination, supplier research.

###### **a. Needs recognition**

Is a procurement process in recognizing the need for a product?

###### **b. Purchase requisition**

It starts with purchase requisition. The requester sends a request for procurement to the purchasing department.

###### **c. Review of request**

The purchase request is then reviewed by the procurement team. Approved requests become Pos while rejected requests are sent back to the requestor with the reasons for rejection.

###### **d. Budget approval**

Once the procurement team raises a PO it is forwarded to the accounting department to receive budget approval.

###### **e. Quotation request**

Once the budget is approved the procurement team forwards several requests for quotation (RFR) to vendors with the intention to receive and compare bids to have a short list of the perfect vendors.

###### **f. Negotiation and contract**

Once the vendor is selected, the contract negotiation and signing are completed, the purchase order is sent to the vendor.

**g. Receive goods and services**

The vendor delivers the promised goods /services within the stipulated timelines. After receiving the purchaser examines the order and notifies the vendor of any issues with the received item.

**h. Three-way matching**

Three documents; purchase order, packaging slip and vendors invoice are being made to reconcile to the pinpoint discrepancies and one to ensure the transaction is accurate.

**i. Invoice approval payment**

The invoice is approved and forwarded to the payment processing depending on the organization norms.

**j. Record keeping**

After the payment process buyers make a record of it for book keeping. All the appropriate documents right from purchase request to the approved invoices are stored in a centralized location.

**Types of procurement**

- Stock procurement
- Single procurement
- Just in time procurement
- Just in sequence procurement

**4.4. Procurement documentation is maintained as per workplace policy and legal requirements.**

**Maintenance of procurement documents**

The procurement document is deemed to include copies of all relevant orders, authorizations, notices, and other documents related to the procurement of work

The processing entity is responsible for maintain the procurement and contract records of each requirement. The processing entity develops the filling system and maintains a complete record on the entire procurement and contract administration process for each requirement.

The entity of contract administration should also maintain working copies of relevant documents to the procuring entity and other entities as determined in the contract administration.

**Procedures of maintaining procurement documents**

- a. The length of time procurement document is kept active files and the internal and external audit of those records is determined by the procurement legal and regulatory framework.

- b. There should be safeguarding of the confidentiality of property information of the supplies, contractors, and service delivery from the general public.
- c. In order to eliminate the need for duplication of relevant stakeholders such as the document should be made available electronically via electronic management system on a controlled access of network or a management of information system.

### **The purpose of procurement documents**

- a. It serves as an important aspect of the organizational element in the project process.
- b. the procurement is the contractual relationship between the supplier and the customer.

### **Types of procurement documents**

- a) RFP (request for proposal)  
It is used an early stage procurement process issuing an invitation for suppliers often through a bidding process, to submit a proposal on a specific commodity or service.
- b) RFI (request for information)  
It is a proposal requested for a potential seller or the service provider to determine what products or service is potentially available in the market place to meet buyers need.
- c) RFQ (request for quotation)  
It's normally used when discussions with bidders are not required and when price is the main or the only factor in selecting a successful bidder.
- d) Offers  
They are bids proposals and quotes made by potential suppliers to prospective clients.
- e) Contracts  
Refers to the final signed agreements between clients and suppliers.
- f) Amendments/modifications  
Refers to any changes in solicitation offer and contracts.

**Table 8: Procurement management plan**

| <b>Procurement Management Plan Template</b>                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                             |                                                                                                                           |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------|
| This template enables you to define your project procurement framework and create this knowledge areas management plan. This plan describes which of the project items will be procured including the time frames they must be supplied in along with justification statements for each item. It defines the contract type and the performance measures that will be throughout the project. |                                                                                                                                                                             |                                                                                                                           |                      |
| Front cover                                                                                                                                                                                                                                                                                                                                                                                  | Description: this page details the physical items found on the cover of procurement plan. Amend it to reflect the needs of your specific project and organizations culture. |                                                                                                                           |                      |
| Displays a top- level summary of essential information relating to the procurement management plan.                                                                                                                                                                                                                                                                                          |                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Project: manager is listed as author along with their contact details</li> </ul> |                      |
| Project working title:                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             | Project Description:                                                                                                      |                      |
| Project sponsor                                                                                                                                                                                                                                                                                                                                                                              | contact Tel:                                                                                                                                                                | Plan Author                                                                                                               | Contact tel: email : |
| Circulated to:                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                             |                                                                                                                           |                      |
|                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                             |                                                                                                                           |                      |

**Commonly encountered procurement documents**

- Engineering and construction work
- Services
- Suppliers

**Features of procurement documents**

- Requires potential bidders to submit all particulars for the employer to evaluate the bidders
- Clear and easy language to understand
- Clear definition of the nature and the quality of the goods and services to be provided
- All the submissions to be set within a clear and lowest manner to ensure that the short list criteria is unambiguous
- Provisions without prejudice to the interest of either party

**4.5. Procurement reports are generated as per workplace policy.****Items found in procurement reports**

- Cost control performance

- Supply risks
- International customers' collaborations
- Sourcing projects

### **Preparing procurement report**

The following should be found in your procurement report:

- a. Supplier performance review  
Every procurement to meet yearly with the most critical supplier to review the performance
- b. Strategic supplier collaboration  
The supplier can provide extra ideas for giving your organization a competitive advantage
- c. Process improvements  
One should share what processes you are evaluating for improvement or actually improving and the gains expected from those improvements
- d. Value creation effort  
The procurement departments are expected to bring value to the organization in the other Variety of other ways

### **Benefits**

- Improve the accuracy of the financial forecasting of your business
- Minimizes errors throughout the supply chain
- Monitors your dependency on suppliers over a set time
- Increase crucial orders cycle and orders fulfillment speed
- Understands which suppliers' relationship are working
- Increase crucial order cycle times and orders fulfillment speed

|                                                        |                         |           |                       |           |                   |               |
|--------------------------------------------------------|-------------------------|-----------|-----------------------|-----------|-------------------|---------------|
| <b>(Logo Here)</b>                                     |                         |           |                       |           |                   |               |
| <b>Address:</b>                                        |                         |           |                       |           |                   |               |
| <b>Department Name:</b>                                |                         |           | <b>Date:00/00/00/</b> |           |                   |               |
| <b>Email Id:</b>                                       |                         |           | <b>Cell NO.00000</b>  |           |                   |               |
| <b>Excel Monthly Purchase Analysis Report Template</b> |                         |           |                       |           |                   |               |
| From 01/3/2016 To 07/03/2016                           |                         |           |                       |           |                   |               |
| <b>Date</b>                                            | <b>Purchases Detail</b> |           |                       |           | <b>Qty Purcha</b> | <b>Amount</b> |
|                                                        | Product A               | Product B | Product C             | Product D |                   |               |
| Jan-16                                                 |                         |           |                       |           |                   |               |
| Feb-16                                                 |                         |           |                       |           |                   |               |
| Mar-16                                                 |                         |           |                       |           |                   |               |
| Apr-16                                                 |                         |           |                       |           |                   |               |
| May-16                                                 |                         |           |                       |           |                   |               |
| Jun-16                                                 |                         |           |                       |           |                   |               |
| Jul-16                                                 |                         |           |                       |           |                   |               |
| Aug-16                                                 |                         |           |                       |           |                   |               |
| Sep-16                                                 |                         |           |                       |           |                   |               |
| Oct-16                                                 |                         |           |                       |           |                   |               |
| Nov-16                                                 |                         |           |                       |           |                   |               |
| <b>Total</b>                                           |                         |           |                       |           |                   |               |
|                                                        |                         |           |                       |           |                   |               |
|                                                        |                         |           |                       |           |                   |               |

Figure 37: Sample Report

### Conclusion

In conclusion, this learning outcome has focused on supply chain operations through proper leadership based on situational needs, staff motivation and reprimand, adherence to procurement processes and procedures, procurement documentation and proper report generation.

### Further Reading



The learners to read further on leadership skills on the balance [careerss.com/top-leadership-skills](http://careerss.com/top-leadership-skills) 20637882

Read on to create procurement repost –[nextlevelpurchasing.com/articles/procurement-repost.php](http://nextlevelpurchasing.com/articles/procurement-repost.php)

Council of supply chain management professionals: The importance of supply chain management.

Recycle intelligence:’’ Exploring the role of supply chain management of the Healthcare’’  
Best colleges: Best online Bachelor’s in supply chain management programs.

### 5.3.5.3 Self-Assessment



#### Written assessment

1. Which of the following are the qualities of leadership skills?
  - a) Demonstrate integrity
  - b) A problem solver
  - c) Motivates others
  - d) He manages others
2. Which of the following are the staff motivators’ techniques?
  - a) Recognition of the achievements of the staff
  - b) Sharing of the profits
  - c) Providing of the incentives
  - d) Increasing of work output
3. Which of the following describes a well procurement employee reprimand, which one is not?
  - a) Improving the performance –the manager will work with the general staff to increase performance
  - b) Collection of a paper trail that will lead to reprimand, this can document every correction action
  - c) This leads to follow the established laid policies
  - d) It disciplines the employee behavior
4. Which of the following is not a type of procurement?
  - a) Single procurement
  - b) Stock procurement
  - c) Just in time procurement
  - d) Sales procurement
5. Which of the following is not a type of procurement document?
  - a) Request for proposal
  - b) Request for information
  - c) Contracts
  - d) Agreements
6. Which of the following are found in the procurement report?
  - a) Supply risks
  - b) Sourcing project
  - c) Cost control performance
  - d) Employees contract agreement

7. What are the qualities of leadership?
8. What is leadership skills?
9. The purpose of the procurement employee reprimand?
10. Discuss the steps involved in procurement process?
11. What are the features of the procurement document?

### **Oral Assessment**

1. What should be found in procurement document?
2. Ways of maintaining of procurement report?

### **Practical Assessment**

1. You are the procurement manager of triple it LTD which is a leading logistics company in East Africa.
  - a) Describe leadership skills you will apply to ensure effectiveness at the department
  - b) Outline some of the techniques you will use to motivate staff
  - c) One of the employee has misbehaved write a reprimand letter for the staff
  - d) Generate a report that indicated the procurement operation for the first three months of the financial year?

#### **5.3.5.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classroom and classroom resources
- Suppliers' manuals.
- Public officers' ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Organizational policy
- Sample procurement documents (Goods received note, Requisition memos, Professional opinion, among others)
- Sample emergency security protocols
- Sample case studies on supply chain operations
- Supply chain court case decisions.
- Public officers' ethics act
- Public Procurement and Asset Disposal Act 2015 and its regulations.

#### 5.3.5.5 References



- Adhitya A; Srinivasan;R. Karimi1,A(2009) Supply chain risk identification using a HAZOP-based approach;no.6(2009)1447-1463
- Lalonde,BernardJ,andTeranceL.pohlen, Issues in supply chain costly, The international journal of logistic management,7(1);1-12
- SKjoeff-Larsen,T (1999) Supply chain management new challenge for researchers and managers in logistics .The international Journal of logistic management 10,no 2 (1999) ;41-54

### 5.3.6 Learning Outcome No 5: Control Supply Chain Operations.

#### 5.3.6.1 Learning Activities

| Learning Outcome No 5: Control Supply Chain Operations.                           |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                           | Special Instructions                                                |
|                                                                                   | <p>1.1 Establish <b>Procurement control mechanisms</b> (resource utilization, movement, approvals) as per workplace policy.</p> <p>1.2 Implement Procurement control mechanisms as per workplace policy.</p> <p>1.3 Monitor, evaluate and review Procurement control mechanisms as per workplace policy.</p> <p>1.4 Monitor and evaluate Supply chain operations as per workplace policy.</p> | <p>✓ Conduct corporate visits.</p> <p>✓ Conduct field research.</p> |

#### 5.3.6.2 Information Sheet No5/LO5: Control Supply Chain Operations.



##### Introduction

This learning outcome will equip trainees with the knowledge and skills on how to control supply chain operations. The trainees will specifically learn skills that will enable them monitor, evaluate, and review procurement control mechanisms as per the workplace policy.

##### Definition of key terms

**Procurement control mechanisms:** Control mechanisms refers to any system that is used to keep one or more variable parameters constant or within specified bounds

Therefore, procurement control mechanisms are those plans that are put to help an organization reduce risk of procurement fraud and improve efficiency.

**Supply Chain Operations:** supply chain operations are critical business operations and have a significant impact on company costs and profits

Supply chain operations include the systems, structure and processes to plan and execute the flow of goods and services from supplier to customer

**5.1 Procurement control mechanisms are established as per workplace policy.**

The following are the ways through which procurement control mechanisms are established to ensure resources utilization, movement and approvals.

- i) Maximizing the organization's purchasing power by focusing on strategic sourcing and obtaining the best value
- ii) Leveraging its expertise in contract negotiations and supplier management to advantage the organization
- iii) Minimizing the risk exposure while maintaining flexibility in procurement activity
- iv) Streamlining processes and investing in new technologies to provide administrative efficiencies.
- v) Ensuring that purchasers are made in accordance with all applicable organization by laws, laws, regulations, codes and ordinances.

**Control mechanism objectives to procurement**

- i. To get data and clues for the top management for monitoring, evaluating, and adjusting their decisions and operational objectives.
- ii. To get clues based on which common objectives can be set to get optimum coordination among units.
- iii. To evaluate the performance metrics of the procurement staffs at each level.

**5.2 Procurement control mechanisms are implemented as per workplace policy.**

**Add content**

The implementation of procurement control mechanisms in an organization involves the following aspects:

**a. Acknowledge risks**

Ensure the risk of procurement fraud is acknowledged on your company risk register, and there is a risk owner who has overall responsibility in the organization.

**b. Carry out three-way match**

Ensure a three-way match is carried out, so do the amounts documented on the requisition, purchase order and invoice all align? Don't forget the delivery note and also check against the contract schedule.

**c. Staff training**

Ensure all staff who are able to make or are involved in financial decisions are trained how to identify procurement fraud. Don't dismiss minor red flags indicating possible fraud such as a perceived close relationship with a supplier that may be closer than you think.

**d. Segregation of duties**

Segregation of duties is a recognized procurement fraud barrier but is not always enforced. In addition, a two-person system should be implemented to define who can either add or delete a supplier from the approved supplier list or change a supplier's bank account details.

**e. Staff movement**

Staff members often move to other departments within an organization. If a staff member moves departments, remove all of their current permissions and authorities and add the permissions applicable to their new role.

**f. Follow procurement process**

Ensure the procurement process is followed and is enforced. Has an order been placed before the procurement paperwork has been raised? If so, why?

**g. Costs variation limit implementation**

Implement a variation limit for costs on both contracts and on projects. If the cost goes over an agreed limit, reasoning can be explained and investigated before it is too late.

**h. Audit the suppliers**

When auditing suppliers, both framework and non-framework suppliers, identify the sub-contractors. Do your contracts stipulate that sub-contractors must be agreed to by your organization before they are engaged?

**i. Spend pattern analysis.**

Analyzing your spend patterns with your suppliers will ensure you are spending what you think you are, check that your procurement thresholds are being followed and there isn't evidence of splitting orders to circumvent tender thresholds.

**j. Procurement fraud prevention.**

Is your organization pro-active in preventing procurement fraud? It is a worthwhile carrying out pro-active data set matches of your staff against suppliers looking for shared bank accounts, addresses and telephone numbers. There is other information that can be gleaned from this data apart from conflicts of interest such as suppliers sharing office buildings that you didn't know about.

### **5.3 Procurement control mechanisms are monitored, evaluated and reviewed as per workplace policy.**

#### **Monitoring procurement control mechanisms involves;**

- i) Cost control
- ii) Schedule control
- iii) Compliance with specifications, terms of reference, statement of work (quality assurance control)
- iv) Compliance with terms and conditions paper work requirements and administrative aspects of the performance

#### **Review of procurement control mechanisms**

- i) Review the performance assessment plan with the supplier so that both parties know the basis upon which performance will be established
- ii) Clarify the communication plan. For simple goods and equipment purchase orders, a telephone or email contact is often sufficient to launch activities supported by regular expediting and monitoring
- iii) Review the contract terms and conditions and other key elements and explain who will do what
- iv) Update the project/program plan with the involvement of both parties, to reflect the actual date of effectiveness as well as milestones/deliverables of the contract and any changes which may have occurred since it was planned.
- v) Discuss how and when to measure and report actual performance. The techniques, timing and frequency of measurement and reporting should reflect the nature and criticality of the work
- vi) Clarify any remaining ambiguities and discuss procedures for managing change and resolving differences.

#### **Importance of reviewing procurement control mechanisms**

##### **i. Improve accountability**

With reviewing the procurement control mechanisms, the contracting authority discloses key information to a third party on how it runs a procurement procedure and responds to criticism brought to its attention, making it more accountable to stakeholders and the general public. This can foster a culture of public demand for accountability in the allocation and disbursement of public funds.

**ii. Increase transparency.**

Procurement control mechanisms review aims at ensuring that provisions related to transparency in procurement are implemented correctly, allowing fair access to procurement opportunities by all market participants.

**iii. Strengthen anti-corruption efforts.**

Procurement control mechanisms review prevent illegal, corrupt practices in procurement by conducting early and thorough ex ante controls of the selected procurements. Additional oversight reduces risks of unlawful and nontransparent practices and is a deterrent for corruption.

**iv. Reduce administrative burden**

Procurement control mechanisms review involves an additional procedural layer, which may slow down the overall procedure. Thus, it is key to design the process in such a way that it balances effectiveness and speed.

**v. Improve competition**

Restoring confidence in the procurement process through better procurement control mechanisms review provides an incentive for greater participation, as companies have greater trust in the possibility of winning through a transparent and fair procurement process.

**vi. Ensure better compliance**

Procurement control mechanisms review helps contracting authorities navigate the complexity of the procurement process more efficiently and with greater legal certainty to ensure compliance. This eventually enables contracting authorities to reduce irregularities and ultimately

spend public funds more efficiently. Furthermore, the number of judicial disputes is likely to decrease and institutional changes can take place as a result, such as, increased use of e-procurement systems, simplified administrative procedures, and improvements in the regulatory environment, as well as better governance.

**Evaluating procurement control mechanisms**

- i) Evaluate each supplier's performance based on timing, deliverables, financial muscles, past engagements and experience among others.
- ii) Analyze extent of risks involved in a particular purchase.
- iii) Evaluate costs of purchasing taking into consideration all the variables involved.
- iv) Evaluate the communication structures used by an organization and carry out necessary changes.

#### **5.4 Supply chain operations are monitored and evaluated as per workplace policy.**

Supply chain operations monitoring are based on a coordinated target system (delivery service, cost and assets), an integrated IT infrastructure and a consistent performance indicator system for measuring process performance.

It involves the following;

- i) Creation of comprehensive transparency over the entire logistics costs of an organization and definition of central fields of action
- ii) Development of supply chain controlling function and intensive employee qualification
- iii) Implementation of Just-in-Time (JIT), Just-in-Sequence (JIS), Vendor Managed Inventory (VMI) and use of logistics service centers to reduce inventory and storage costs
- iv) Optimization of the network structure through consolidation of suppliers or logistics centers
- v) Replacing inventories with information
- vi) Outsourcing of logistics services in order to exploit synergies and specialization advantages.
- vii) Targeted analysis of the delivery range and design of the warehousing and disposition strategy for the individual articles.

To evaluate supply chain operations, the following conditions must be met;

##### **A. Process support**

Packaged application software that structures and automates a group of tasks pertaining to the review and optimization of business operations (i.e. controls) or the discovery and development of new business (i.e. opportunity)

##### **B. Separation of functions**

Can function independently of an organization's core transactional applications, yet can be dependent on such applications for data and may send results back to these applications

##### **C. Time oriented, integrated data from multiple source.**

Extracts, transforms and integrates data from multiple sources (internal or external to the business) – supporting a time-based dimension for analysis of past and future trends or access such as database

#### **Conclusion**

The learning outcome covered operations control to achieve monitoring, evaluation, and review of procurement control mechanisms as per the workplace policy.

## Further Reading



Lysonns, K and Farrington, B (2006) Purchasing and Supply Chain Management, Pearson Education Limited, England

### 5.3.6.3 Self-Assessment



#### Written assessment

1. Which of the following is not a condition to be met when evaluating supply chain operations?
  - a) Process support
  - b) Replacing inventory with information
  - c) Separation of functions
2. Which of the following is not a way of monitoring procurement control mechanisms?
  - a) Test control
  - b) Compliance with terms
  - c) Schedule control
3. Supplier performance can be evaluated based on the following except?
  - a) Experience
  - b) Location
  - c) Financial muscles
4. You can manage the following good movement via shipping
  - a) Stock issue for a delivery
  - b) Stock transfer using stock transport orders
  - c) Return deliveries to vendors
  - d) Return from the customer
5. A document that is a receipt for goods delivered to the common carrier for transportation, a contract for the services rendered by the carriers and a document of title is known as a(n):
  - a) Export licenses
  - b) Commercial invoice
  - c) Consular invoice
  - d) Bill of lading
6. Which of the following is TRUE?
  - a) Procurement involved less than 5% of the GDP
  - b) Procurement involves selling of long-term assets that have depreciated and lowered their productivity

- c) Procurement has no procedures
- d) Procurement takes up more than 12% of the GDP

7. Differentiate between framework and non-framework suppliers?

### **Oral Assessment**

1. What are the controls of supply chain monitoring?
2. Procurement control mechanisms review

### **Practical Assessment**

XYZ limited company has hired you as their supply chain operations chief manager. The company has been making losses for quite sometimes. Most of the losses arise from supply chain activities. As the supply chain operations manager;

- a) Develop and describe control mechanisms you will use
- b) Develop a plan you will use in monitoring and evaluation of control mechanisms
- c) Provide an outline on how you will monitor and evaluate supply chain operations?

### **5.3.6.4 Tools, Equipment, Supplies and Materials**

- Computers
- Stationery
- Classroom and classroom resources
- Suppliers' manuals.
- Public officers' ethics Act
- Anti-Corruption and Economic Crimes Act 2003
- Public Finance Management Act 2012
- Organizational policy
- Sample procurement documents (Goods received note, Requisition memos, Professional opinion, among others)
- Sample emergency security protocols
- Sample case studies on supply chain operations
- Supply chain court case decisions.
- Public officers' ethics act
- Public Procurement and Asset Disposal Act 2015 and its regulations.

### **5.3.6.5 References**



Benton, W. C Jr (2007) Purchasing and Supply Management. McGraw – Hill/Irwin New York, USA

Fearon, H.E. (1988) Purchasing Organizational Relationship.  
Lysonns, K., and Farrington, B (2006). Purchasing and Supply Chain Management,  
Pearson Education Limited, England.

## **CHAPTER 6: PROCUREMENT CONTRACTS MANAGEMENT/MANAGE PROCUREMENT CONTRACTS**

### **6.1 Introduction**

Procurement contracts management unit of competency is a core unit of competence offered in the TVET level 6 qualification for supply chain. The unit specifies the competencies required to manage procurement contracts which involves establishing and maintaining a good relationship between vendors and the procuring entity, monitoring the progress of procurement contracts and evaluating vendor contract performance. This unit is significant in providing contracts management skills to the trainee in the field of purchasing, warehousing and materials management which will enable him/her to succeed in the today's fast paced business environment.

The critical aspects of competencies to be covered includes demonstrating ability to develop tools and schedule for monitoring contracts progress, monitoring progress of contracts and preparing progress report, taking appropriate action-based progress report, preparing clear specifications for procurement of goods, works and services, conducting vendors and bids evaluation and awarded contracts fairly, objectively and legally, demonstrating understanding of incentives used to enhance buyer supplier relationships. The basic resources required include; computers, stationery, classroom and classroom resources, the constitution of Kenya 2010, Public Procurement and Asset Disposal Act 2015 and its regulations, Public Officers Ethics Act, Anti-Corruption and Economic Crimes Act 2003, and Public Finance Management Act 2012. This unit covers three learning outcomes. Each of the learning outcome presents learning activities that covers performance criteria statements, thus creating trainees an opportunity to demonstrate knowledge and skills in the occupational standards and contents in the curriculum. Information sheet provides definition of key terms, content and illustrations to guide in training. The competency may be assessed through written tests, demonstration practical assignment and case study. Self assessment is provided at the end of each learning outcomes.

### **6.2 Performance Standard**

Manage procurement contracts, monitor the progress of procurement contracts, manage vendor relationships, evaluate vendor contract performance in accordance with workplace policy, the monitoring schedule and legal requirements and standards operating procedures.

### **6.3 Learning Outcomes**

#### **6.3.1 List of learning outcomes**

- a. Monitor progress of procurement contracts.
- b. Manage vendor relationships.
- c. Evaluate vendor contract performance.

### 6.3.2 Learning Outcome No 1: Monitor progress of procurement contracts

#### 6.3.2.1 Learning Activities

| Learning Outcome No 1: Monitor progress of procurement contracts                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Special Instructions                                                                                                                                                                                            |
|                                                                                   | <ul style="list-style-type: none"><li>1.1 Develop tools for monitoring progress (data collection tools) of contract based on parameters to be measured.</li><li>1.2 Monitor contract progress schedule developed as per workplace policy.</li><li>1.3 Conduct contract progress monitoring in accordance with the monitoring schedule.</li><li>1.4 Prepare contract progress monitoring report as per workplace policy.</li><li>1.5 Take action on the contract progress report based on workplace policy.</li></ul> | <ul style="list-style-type: none"><li>• Groups of 5-10 to develop tools to monitor business progress</li><li>• Provide a sample contract monitoring report</li><li>• Class tests</li><li>• Simulation</li></ul> |

#### 6.3.2.2 Information Sheet No6/LO1: Monitor Progress of Procurement Contracts



##### Introduction

Contract progress monitoring is conducted in accordance with the monitoring schedule. This unit will specify the competence required to monitor progress of procurement contracts. It will expose the trainee to the legal requirements that are followed in the monitoring of the procurement contracts. The learning outcome will also expose trainees to the contract progress report.

##### Definition of Key Terms

**Monitoring progress tool:** These are the tools used by the Contracting officers Representative (COR) for post-award management of the contract. The COR uses these tools to monitor contractor performance based on contract terms and conditions.

**Legal requirements:** These are the stated rules and regulations required by law for engaging in a certain activity (business) i.e. official approval, a license or a permit.

**Contract progress report:** It means a report prepared by the contractor in the form and details prescribed by the specification and submitted in a certain agreement upon period to the clients in accordance with standard operating procedures.

## **6.1 Contract Monitoring**

Contract monitoring is a process of making sure that vendors adequately or efficiently perform a contracted service or work.

### **1.1 Tools for monitoring progress of contract are developed based on parameters to be measured**

#### **Tools for monitoring progress**

The most effective tools for monitoring contractor performance based on contract terms and conditions are as stated below:

- Contractor Progress Reports
- Contractor Quality Assurance Plan (QAP)
- Quality Assurance Surveillance Plan (QASP)
- Earned Value Management (EVM)
- Performance Assessment
- Product or Service Inspection and Acceptance
- Contract Administration Plan (CAP)

#### **Development of tools for monitoring procurement contract progress**

A successful procurement contract progress is dependent on effective contract management and contract administration processes and tools which result to lower operational costs, increased user agency, efficiency in delivering services to taxpayers, and user satisfaction. The following are essential elements for development of tools to monitor contract progress;

- Preparing a Contract Administration Plan (CAP).
- Scheduling regular meetings or on-site visits to customer agencies to monitor and discuss the progress of the contract and the performance of the contractor.
- Convening kick-off meetings.
- Training for best practices in contract administration.
- Collecting meaningful data from user agencies.
- Establishing good communication between the central procurement office and customer agencies before, during and after the contract has been awarded and signed.
- Assessing contract risks and monitoring after the contract has been awarded.
- Using tracking tools to monitor spending patterns and whether a contract is working as intended.
- Establishing performance metrics.

### **1.2 Contract Monitoring Progress is Scheduled**

#### **Contract administration plan**

This is a document developed as tool in the pre-award stage of contract management to aid in contract monitoring and ensures that all activities are carried out effectively by the

contractor. The following is the information documented in the contract administration plan (CAP):

- Contract administration team members.
- Justification of solicitation source selection method.
- Scope of work on specification that include deliverables.
- Contract goals.
- Pricing structure for contract.
- Delivery terms and requirement.
- Potential contractual risks and assignment risk levels.
- Key contract terms and conditions to include risk mitigation and information security.
- Contract monitoring methods.
- How performance will be measured and accepted.
- Milestones for measurement (linked to payment terms).
- Payment terms.
- Reporting methods and frequency.
- Documentation required.
- Names of contract administration team members responsible for measuring performance, reporting, documenting files, payment, approval of change orders, contract close out checklist, procedures and who is responsible for contract closeout files.

### **Functions of the central procurement office during contract administration**

The central procurement office should work with users' agencies to determine:

- Roles and responsibilities and who is responsible for each activity.
- How performance will be evaluated.
- Reporting tools and processes.
- Monitoring methods.
- Process for resolution of dispute and claims

### **Aspects of contractor performance**

- Delivery i.e. lead time
- Service level
- End user and stakeholder's vendor performance rating
- Final decision on agency complaints

### **Best practices in monitoring procurement contracts progress**

- Gathering feedback from user agencies or department about the service or work done through survey, telephone or face-face inquiry.

- Documenting and maintaining of contract file to ensure the delivery is in line with the contract requirements issues addressed timely.
- All contract performance reports should be properly documented and included in the official contract file.
- The contract file should contain the essential record of contract award and performance.
- Documenting contract compliance and performance issues when the contractor has underperformed as agreed upon and addressing them timely.
- Regular communication with the contractor to identify problems in time.
- Dispute resolution processes being in place to resolve problems and reach agreement rather than seeking legal solution.
- Anticipating amendments such as contract prices, time of performance, extension and renewals since contract changes are inevitable.
- Provision of written guidance by the procurement manager to agencies on contract dispute and escalation procedures.
- Poor or non-performance should never be accepted.

### **1.3 Conducting Contract Progress Monitoring**

#### **Developing of procurement contract progress monitoring schedule**

##### **Contract progress monitoring schedule**

This is where a procurement manager plans out each contractor's activity for the project work. It includes the following information:

- The company's standard documents to be used.
- The types of contracts the manager plan to use and any metrics that will be used to measure the contractor's performance.
- The planned delivery dates for the work or products the manager is contracting.
- The number of vendors or contractors involved and how they will be managed.
- How purchasing may impact the constraints and assumptions of the project plan.
- The coordination of purchasing lead times with the development of the project schedule.
- The identification of the prequalified sellers (if known).

#### **Implementation of contract monitoring schedule**

##### **a) Procurement team**

List everyone authorized to participate in the procurement planning and decision-making process with their contract information.

##### **b) Item requirement**

Item requirement include several levels of information about every item that needs to be purchased. Gathering information about all materials required by the project depending on

the type of project. This list might include tangible assets i.e. building materials or equipment and intangible assets like software licenses. Include all pertinent information about each item, size, quality, technical requirement and any information that ensures purchase of the correct tool or material for the job.

#### **1.4 Preparation of Contract Monitoring Report**

##### **Preparation of contract progress monitoring report**

**The progress report:** Is a document prepared by the project team members or by the management team members to provide regular feedback to the contract manager regarding the progress of the contract. The vendor provides weekly or monthly progress report of the actual status adequate to allow the supplier to monitor the progress against the original schedule and toward the timely completion. The contract progress monitoring report should reflect the work left to be completed and the completed work as per standard operating procedures. It may also include tasks that have been delayed and require rescheduling.

##### **Basic requirements for preparation of contract progress monitoring report**

- Look at what has happened since the last review.
- Plan the way forward from the current point in time.
- Revise the schedule as necessary.
- Communicate the revised schedule to all concerned parties.

#### **1.5 Action is taken**

##### **Implementation of contract progress report**

**Performance reporting:** It is about collecting, processing and communication information to key stakeholders regarding the performance of the project. it can be used using various tools and techniques such as;

- Performance review meetings that take place to assess the projects progress.
- Variance analysis which is about comparing actual project results (in terms of schedule, resources, cost, scope, quality and risk) against planned or expected ones.
- Earned Value Analysis (EVA) used to assess project performance in terms of time (schedule) and cost.
- Financial and output performance indicators-used to measure financial and physical progress of the project.

##### **Typical contents of a progress report**

- Reporting period
- Project title
- Project managers name
- Authors of the report

- Date of submission
- Project synopsis
- Project progress in the reporting period
- Work program for the following reporting period
- Updated and revised activities schedule

## Conclusion

This learning outcome unit covered contract monitoring schedule, report and their preparation and implementation as per workplace policy. It also talked about the required tools and techniques in procurement contract progress monitoring and contractor performance measurement and management.

## Further Reading



Lewis, M.A. and Roehria, J.K. (2009). Contracts, Relationship and Integration: Toward a Model of the Procurement of Complex Performance. *International Journal of Procurement Management*, 2(2):125-142.

### 6.3.2.3 Self-Assessment



#### Written assessment

1. The procurement manager approves the purchases requested by the user department. (yes or no).
2. The following are the contents of a progress report. Which one is not?
  - a) Reporting period
  - b) Project title
  - c) Date of submission
  - d) Lead time
3. Which one of the following is not a content of progress report?
  - a) Project title
  - b) Synopsis
  - c) Reporting period
  - d) Company name
4. Which one is not an aspect of contractor performance?
  - a) Delivery i.e. lead time
  - b) Service level
  - c) End user and stakeholder's vendor performance rating

- d) None of the above
- 5. Highlight five functions of the procurement manager during contract management.
- 6. Define performance reporting.
- 7. Research on what the contract file should contain as far as the essential record of contract award and performance is concerned

### **Practical Assessment**

Visit a busy manufacturing firm and engage the procurement for you to analyze sample monitoring reports and pick out the specific areas.

### **Project**

Compare two manufacturing firms and evaluate the similarities and differences in their monitoring of contract tools.

#### **6.3.2.4 Tools, Equipment, Supplies and Materials**

- Direct instruction
- Role play
- Case studies
- Field trips
- Discussions
- Demonstration by trainer
- Practice by the trainee
- Simulation

#### **6.3.2.5 References**



Department of Health (DH), (2013). Securing Best Value for NHS patients: Requirements for Commissioner to Adhere to Good Procurement Practice and Protect Patient Choice. London: DH.

Department of health DH, (2011). Equity and Excellence: Managing the Transition. London: DH.

Kirkman, Marshall M., (1887). The Handling of Railway Supplies: Their Purchase and Disposition. Chicago.

Lewis, M.A. and Roehria, J.K. (2009). Contracts, Relationship and Integration: Toward a Model of the Procurement of Complex Performance. International Journal of Procurement Management, 2(2):125-142.

National Audit Office, (2011). The Procurement of Consumable by NHS Acute and Foundation Trusts. London: National Audit Office.

### 6.3.3 Learning Outcome No 2: Manage Vendor Relationships

#### 6.3.3.1 Learning Activities

| Learning Outcome No 2: Manage vendor relationships                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Special Instructions                                                                                                                                                                                                         |
|                                                                                   | <p>2.1 Prepare clear specifications in accordance with needs of user as per workplace policy.</p> <p>2.2 Evaluate vendors fairly and objectively as per legal requirements (contract, procurement laws, terms and conditions).</p> <p>2.3 Award contracts fairly and objectively as per legal requirements and standards operating procedures.</p> <p>2.4 Give incentives (extended contracts, timely payment) to vendors as per workplace policy.</p> <p>2.5 Exercise flexibility based on the case at hand.</p> <p>2.6 Pay vendors in accordance with the contract and workplace policy.</p> <p>2.7 Appraise vendors as per SOPs. Manage Buyer-Supplier relationship.</p> | <ul style="list-style-type: none"><li>• Groups of 5-10</li><li>• Class tests</li><li>• Simulation</li><li>• Visit a functional supermarket and engage the marketing manager to determine how vendors are evaluated</li></ul> |

#### 6.3.3.2 Information Sheet No6/LO2: Manage Vendor Relationships



##### Introduction

This unit specifies the competency in vendor evaluation and awarding of contracts which should be done fairly and objectively as per legal requirements and standards operating procedures. It exposes the trainee to the supplier appraisal and criteria for selecting new suppliers.

##### Definition of Key Terms

**Incentives:** A thing that motivates or encourages someone to do something.

**Legal requirements:** These are the stated rules and regulations required by law for engaging in a certain activity (business) i.e. official approval, a license or a permit.

**Supplier appraisal:** An assessment of the potential supplier so as to be used as the company future suppliers. Basically, used for selecting new suppliers.

## **2.1 Clear Specifications are Prepared**

### **Preparation of specifications of needs/requirements in contracts**

Specifications are statements of requirements from the supplier.

#### **The general process of developing specification**

##### **a. Planning and analysis**

Planning takes place before writing begins. Key people who can help such as purchasing staffs, technical officers, project officers and manager. Planning helps in understanding of requirements and alternative solutions defining and knowing what is available to meet the agency or department needs.

**Value analysis**-Can be to highlight and explore possible solutions. It's a complex cost technique requiring expertise for its successful use.

##### **b. Consultations and information gathering**

Can be obtained by discussing with purchasing officers, technical and users of other similar goods or services within the department agency. Purchasing should be involved from start to the end. Other sources of information include:

- Other department's federal and local government. Either industry association or companies ensure that industry does not assume pre-offer negotiations.
- Educational institutions e.g. universities and TAFE institute.
- County standards
- Industrial supplies office limited (ISO Queensland which can assist in identifying and evaluating appropriate local industry capabilities).

##### **c. Writing specification**

- Use of simple language without jargon to minimize misinterpretation.
- Define terms, symbols and acronyms.
- Do not explain the same requirement more than one section.
- Define each aspect to the requirement in one or two paragraphs if possible.
- Adopt a user-friendly format.
- Number the sections and paragraphs.
- Seek feedback from someone.
- Discuss the draft and refine it.
- No fixed rules on formats and structures because each specification effects a different requirement or need.
- A specification should list the functional performances and technical characteristics separately.

Refine the structure before writing by discussing with colleagues and purchasing officers. Include: tables, sketches, diagrams and statistical matter. If these helps to make the specification clearer. Be careful that these types of information do not limit the options for offers to provide alternative solution.

**d. Vetting specifications and obtaining approval**

After writing the specification, ask a colleague who is unfamiliar with the requirement to criticize it from a potential supplier's view. Try to identify improvements by considering:

- Reliability
- Simplicity of meaning
- Clarity
- Logic
- Seek approval from the appropriate financial purchasing delegates in the department/agency after vetting the specification.

**e. Issuing the specification**

The specification should be included as part of “invitation to offer” document. The invitation to offer should target suppliers that are capable of meeting the specification by direct approach, coffer market analysis or through advertising in news, websites, industry magazine, etc.

**f. Revising and storing the specification**

Specification should be renewed at the end of the purchasing activity to ensure that it effectively defined the goods and services that were actually bought when review is completed and relates to goods or services that are likely to be purchased frequently or when review specification has been completed and it relates to goods and services that are likely to be purchased.

**g. Selecting the right approach to describe requirement**

- Use of a brand name or samples frequently best described requirements.
- Use of brand name is appropriate.
- Obtain desired level of quality or skill when these are not described.
- Gain the benefit of wide advertising of the brand name.
- Accommodate users who have a bias or prejudice (whether founded or unfounded) in favor of the brand.

**How specification should be written**

- Use of simple language.
- Adoption of user-friendly format.
- Define terms, symbols and acronyms.
- Number sections and paragraphs.
- Seek feedback from people.
- Be concise.
- Discuss draft and define it.

## 2.2 Vendors Evaluation is Done Fairly

### Evaluation of vendors

#### Evaluation criteria

The basic evaluation criteria:

- Cost
- Quality
- Delivery performance

a) **Supplies cost:** An organization can measure cost in a number of ways. Most common method is to track supplier's real cost after adjustment for inflation. Another method is to compare supplier's cost against others within the industry or business.

b) **Quality:** A buyer can compare quality against some previously specified performance objectives. Track improvement rates and compare with similar suppliers. It is important for a supplier to define clearly supplier's quality requirement.

c) **Delivery performance:** Orders or material releases sent to a supplier have a quality and material due date. A buyer can track how well a supplier satisfies the quantity and due date commitments. A buyer can also track the supplier's material lead time.

**NOTE:** Quality lead time performance and due date compliance helps define a supplier's delivery performance.

#### Other qualitative factors to be measured

- Problem resolution ability
- Technical ability
- Supplier new product support
- Supplier management capability
- Production scheduling and control system
- Information system capability
- Electronic data interchange
- Long term relationship potential

#### Reasons for evaluating supplier's performance

- It signifies supplier performance.
- Assists in decision making regarding whether a supplier is to be retained or removed.
- Assists in deciding to which supplier a specific order should be placed.

- Prevents performance slip page.
- Provide suppliers with incentives for continuous improvement.
- Helps decide how to distribute the expenses for an item.

### **Common supplier rating methods**

- a) **Subjective method:** Generally assigned as a questionnaire with numerical rating scale compared with a number of viewers. This is a simple approach with the small businesses with a supplier base.
- b) **Survey method:** It is a purchased service in which a research organization contacts a number of other customers to obtain their view on the performance of a supplier. It is usually used by large organizations.

### **Disadvantages**

- Expensive
- Evaluation is based
- c) **Comparative method:** Suppliers are evaluated independently on agreed factors such as price, quality and delivery.
- d) **Weighted point method:** A weighted factor is established for each of the area score is assigned to each factor that indicates supplier performance. The score is multiplied by the weight and then averaged.
- e) **Percentage based methods:** It measures the percentage of quality defects of late delivery and uses that percentage to rate the supplier.
- f) **Cost based method:** Evaluate supplier performance based on total non-productive cost associated with supplier's performance. Non-productive cost is estimated cost of non-compliance e.g. cost of rejection.

### **Function of specification**

- Helps supplier to give the organization quality goods.
- Helps in comparison between quotations from different suppliers.
- Helps to solve disputes arising from what has been supplied.

### **Types of specification**

#### **a) Standard specification**

This is used for recurrent needs.

#### **Advantages of using standard specification**

- Facilitates communication.
- Cost effective.
- Results in wider competition and lower prices.
- Can be used in an organization standardization programs resulting into purchasing savings, price inspection, material handling.

- Standardized items are readily available.
- Designs by professionals' societies are often state of art and tested.
- Cost of developing a design specification is avoided.

#### **Disadvantages**

- Maybe dated. The buyer may take advantage of the latest technology.
- Specifications may call for inputs or processes that are difficult or expensive to achieve.
- Use of standardized result to purchase of standardized items. The incorporation of such standardized items may conduct with marketing desire to sell a unique product.

#### **b) Design specification**

Spell out in details the materials to be used, their sizes, tolerance exact chemical and physical characteristic and how the item is to be fabricated.

##### **Advantages of design specification**

- Purchasing organization avoid purchasing on a single source basis and enjoy cost saving.
- Purchasing organization avoid paying.
- Facilitate cooperates standardization program and many saving are enjoyed through such a program.
- Can solve a problem that no supplier can design if it's true.

#### **Disadvantages**

- Expensive to develop both time and human resources required.
- Purchaser is responsible for adequacy of specification and buying firm may use obsolete.
- May deny purchaser latest advances in both technical development and manufacturing process.

#### **c) Performance specification**

It generally describes a product by capacity, function or operation instead of its chemical, physical or quality characteristic. Supplier need demonstrates acceptable performance to achieve acceptance of product.

##### **Advantages of performance specification**

- Easy to prepare.
- Their use of performance specification tends to avail the purchaser to latest technology.
- Purchaser obtains specified level of quality.
- several already designed items can meet performance specification depth of competition is enhanced.

- Allow a greater degree of innovation by suppliers

### **Supplier relationship management**

It is the interaction between two or more parties either by buying or supplying goods and services. The relationship must be of two way and it should be in the position to benefit either from the parties by improving its performance.

### **Satisfaction profitably**

Management and building of this relationship involve 3 phases i.e.

- i. **Initiation phase:** During this phase all parties concerned identify their needs as well as their inspiration taking into consideration the strategic fitness of all parties.
- ii. **Agreement phase:** The parties determine how their needs will be met and how the specification will be sold, who will be responsible for determining and defining performance indicators as well as how they will be measured.
- iii. **The delivery phase:** The parties perform their obligations as defined within the agreements which must be acceptable to both of them. in most cases it is the longest phase characterized by continuous improvement, supplier performance measurement, supplier rating as well as quality.

### **Conflict in supply relationship**

- Delay in delivery.
- Lack of information.
- Poor quality products and services.
- Delay in payment.

### **Advantages of buyer-seller relationship**

- Development of pure mutual trust.
- This is the foundation of all strong relationship, trust refer to the belief, to the character, ability strength or truth of another party.
- Solving product quality problems.
- Working together with the supplier enables teams from both sides to assess the quality of the products and come up with ways of improving on the quality leading to low cost for the buyer.
- Opportunity to evaluate which supplier should receive long term contracts.

### **The characteristic of successful buyer-seller relationship**

- Win-win approach reward sharing.
- Joint effort to resolve disputes.
- One or limited number of suppliers for each purchased item.
- A commitment to quality defect free product having correct specifications as required by the buyer.
- Open exchange of information i.e. on new products, cost etc.

- A credible commitment to work together during difficult times.

## **2.3 Contracts awarding.**

### **Factors to consider in supplier selection**

- Cost.
- One should look for suppliers with fair prices.
- Quality.
- Suppliers with improved technology/equipment are likely to produce quality goods.
- Availability.
- If the supplier is present when they are needed for any supplies.
- Innovation.
- The capability of a supplier being able.
- Responsiveness.
- How quick one can respond.
- Commitment.
- If the supplier is committed to work with the buyer.
- Risk mitigation.
- Showing machines to mitigate the risks.

## **2.4 Incentives are Given to Vendors**

### **Supplier incentives**

Supplier's incentives are well described when an organization (buyer) aligns its incentives that is if the risks, cost and rewards of doing business, are distributed fairly between the parties.

### **Importance of aligning supplier incentives**

- To prevent excess inventory.
- To prevent stock out.
- To avoid incorrect forecasts.
- To encourage adequate sales efforts.
- To promote good customer service.
- It leads to operational efficiency.
- It promotes good buyer-seller relationship.

### **Challenges facing supplier incentives**

- Hidden actions by partner firms.
- Hidden information. The failure of both parties to share information i.e. data or knowledge about firms.
- Badly designed incentives.

### **Solutions to challenges facing supplier incentives**

- Acknowledge by both parties that such problems exist.

- Diagnosing the cause-hidden actions, hidden information or badly designed incentives.
- Creating or redesigning incentives that will induce pertness to behave in ways that maximize the supply chains profits.
- Sharing information that was previously hidden among the parties.
- Buyers using personal relationship or intermediaries to develop trust with suppliers.
- Buyers conducting incentives audits when they adopt new technologies, enter new markets, or launch supply chain improvement programs.
- Training managers about processes and incentives at the organization.

## **2.5 Supply Flexibility**

This is the speed in which the supply chain responds to changes in demand and the business environment in order to create or preserve competitive advantage.

### **Ways to improve supply chain flexibility**

- Institutionalizing partners with suppliers and subcontractors in order to “straighten the chain” while dealing with fluctuations and changes in demand.
- Transferring operations to external sources i.e. outsourcing.
- Building tools and capabilities to quickly identify changes in demand.
- Building means of dealing with variable demand and supply chain efficiency.
- Formulation of organizational structure and work support processes.

### **Barriers to supply chain flexibility**

- Integration capabilities between various information systems throughout the supply chain.
- Organizational structure and processes that don’t support s in supply chain flexibility.
- Management requests to lower cost at expense of flexibility.
- Harnessing the management due to the difficulty quantifying the economic value of “upgrading” the flexibility in the supply chain.

## **2.6 Payment of Vendors**

Supplier payment is the final step in the procurement cycle. This is done after the goods and services ordered arrive from the supplier then the buyer receives an invoice from the supplier. The buyer verifies the purchase order and the invoice to make sure the details in both documents matches and then they are entered into the account payable system is controlled and managed by the finance department which processes the payment of vendors.

### **Importance of paying suppliers on time**

- Creates a positive relationship between parties.
- Suppliers are keen to work with the buyer.

- Suppliers confidence is increased in the buyer as a business partner.
- The buyer is able to negotiate better deals.
- The buyer avoids late payment interest charges.

### **Best practices in vendor payment**

- Agreeing the terms of payment from the outset.
- Monitoring payment system to ensure its flexible enough to meet any different payment terms agreed upon.
- Paying of undisputed bills by their due date.
- Fostering good relations with clients.
- Agreeing on a system for resolving any payment disputes.

### **Supplier's assessment methods**

The two types of supplier assessment methods include:

- Supplier appraisal
- Vendor rating

### **2.7 Supplier/Vendor Appraisal**

Assessment of the potential supplier so as to be used as the company future suppliers. Basically, used for selecting new suppliers.

#### **Two main researches**

##### **a) Desk research**

Analysis of the supplier's documents by use of CVs whereby one publishes financial information in the internet and analyzes it. It includes;

- Organization of charts.
- Statement of financial position.
- Cash flow statement.

##### **b) Field research on capacity survey**

This is whereby the buyer has to visit the supplier's premises to ascertain the following:

- Quality assurance system.
- Cost control system.
- Effectiveness of production system.
- Appropriateness of equipment.
- Morale level of motivation of workplace.

#### **What should be appraised?**

- Financial status.
- Production capacity.
- Human Resource.

- Quality Assurance systems.
- Performance.
- Environmental and ethical factors.
- Information Technology.

### **Vendor/supplier rating**

Used to assess the performance of already existing suppliers so as to improve their performance or replace them.

### **Subjective supplier**

A purchasing officer is appointed to observe on how well the suppliers are performing and then judge each supplier. It's subjective because different individual have different value of judgment.

#### **Advantages**

- Fast to carry out.
- Cheap to carry out.

#### **Disadvantages**

- May not be factual because of personal likes and dislikes.
- May not be accurate.
- May be prone a subject to bribery.
- No records kept for future reference.

### **Objectives supplier ratings**

Marks are allocated to each of the factors that determine a good supplier each time a supplier performs. These factors include right time, quality, cost, price, quantity, place and responsiveness. The marks are completed at the end of each period and used to come up with a conclusion.

#### **Advantages**

- The method is more accurate than subjective.
- Avoids complains as it is based on facts.
- Minimizes chances of bribe.
- Reference in form of records kept.

#### **Disadvantages**

- Record keeping may be expensive.
- Time consuming.
- Requires a trained personality.

## Conclusion

This learning outcome covered the interaction between two or more parties either by buying or supplying goods and services. It is important for the learner to be able to prepare clear specifications, evaluate vendors fairly and objectively, award contracts, give incentives, exercise flexibility based on the case at hand, pay vendors, and appraise vendors as per SOPs.

## Further Reading



National Audit Office. (2011). The Procurement of Consumables by NHS Acute and Foundation Trust. London: National Audit Offices.

## 6.3.3.3 Self-Assessment



### Written Assessment

1. The following of paying supplier of time include the following except one. Name it?
  - a) Negotiate better deals.
  - b) Avoid late payment.
  - c) Positive relationship between the parties involved.
  - d) None of the above.
2. Supplier's incentives are well described when an organization (buyer) aligns its incentives.
  - a) True
  - b) False
3. Delay in delivery can cause conflict in supply.
  - a) True.
  - b) False.
4. The following are reasons for evaluating supplier except
  - a) It signifies supplier performance.
  - b) To know their worth.
  - c) Assists in decision making regarding whether a supplier is to be retained or removed.
  - d) Assists in deciding to which supplier a specific order should be placed.
5. Define supplier appraisal.
6. Explain how vendor should be appraised.
7. Discuss obstacle to buyer supplier relationships.

8. Discuss role of customer relationship management in supplier relationships.
9. Select an organization of your choice and carryout supplier quality management and submit a report

#### **6.3.3.4 Tools, Equipment, Supplies and Materials**

- Direct instruction
- Role play
- Case studies
- Field trips
- Discussions
- Demonstration by trainer
- Practice by the trainee
- Simulation

#### **6.3.3.5 References**



Department of health (DH) Equity and Excellence: Managing the Transition. London: DH: 3022.

Department of Health (DH). (2013). Securing Best Value for NHS Patients; Requirement for Commissioners to Adhere to Good Procurement Practice and Protect Patient Choice. London: DH.

National Audit Office. (2011). The Procurement of Consumables by NHS Acute and Foundation Trust. London: National Audit Offices.

### 6.3.4 Learning Outcome No 3: Evaluate vendor contract performance

#### 6.3.4.1 Learning Activities

| Learning Outcome No 3: Evaluate vendor contract performance                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Special Instructions                                                                                                                                                                                                 |
|                                                                                   | <p>3.1 Develop vendor contract progress evaluation tools based on parameters to be measured.</p> <p>3.2 Appoint vendor contract progress evaluation committee as per workplace policy.</p> <p>3.3 Prepare and circulate notice for vendor contract progress evaluation committee meeting as per workplace policy.</p> <p>3.4 Conduct vendor contract progress evaluation as per workplace policy.</p> <p>3.5 Prepare vendor contract progress report as per workplace policy.</p> <p>3.6 Terminate none performing vendor contracts as per legal requirements as per standard operating procedures.</p> | <ul style="list-style-type: none"><li>• Groups of 5-10</li><li>• Class tests</li><li>• Simulation</li><li>• Site visits to the supplier premises and get information to conduct vendor contract evaluation</li></ul> |

#### 6.3.4.2 Information Sheet No 6/LO3: Evaluate Vendor Contract Performance



##### Introduction

This learning outcome will train on how to evaluate vendor contract performance. Evaluation of vendor performance is important in ensuring that an organization/ company is able to purchase quality products or receive value for their money. In this learning outcome trainees will get skills and knowledge of how to develop vendor progress evaluation tools, appoint a vendor evaluation committee, preparing and circulating vendor committee meeting. The trainee will also acquire knowledge and skills in preparing vendor report and procedures to follow to terminate non performing contracts.

##### Definition of Key Terms

**Legal requirements:** These are the standards, rules, codes, regulations or rights imposed on an organization by law.

**Vendor Evaluation:** This is the monitoring of vendors' performance by a person or department against set standards.

**Performance:** This is the execution of tasks as per the guidelines or set organizational indicators.

### **Content/Procedures/Methods/Illustrations**

#### **3.1 Vendor Contract Progress Evaluation Tools are Developed Based on Parameters to Be Measured**

Vendor evaluation is a process that company use to make decision on which vendor should be allowed to provide services of products in case where there are many vendors. This process can also be used when the progress of a contract is being required. This can happen when items are being purchased for the first time, the item is sourced differently. Evaluation of vendor performance is very important in organizations. This is because:

- It assists organizations to reduce procurement costs
- It assists organizations to manage risks effectively
- Helps organizations to be strategic in their relationship with vendors
- It develops supply chain management strategies
- It helps vendors to improve their performance

A vendor's performance should be evaluated based on context of their contractual obligations. The following is a list of categories which organizations may consider using as performance evaluation criteria. Recommended criteria for vendor performance evaluation are:

- Accountability
- Hazard and Risk Assessment
- Accuracy
- Human Resources
- Administration
- Innovation
- Collaboration
- Invoicing
- Communication
- Quality
- Compliance
- Safety
- Cost
- Schedule
- Delivery
- Scope
- Emergency Response
- Supervision

## Vendor Evaluation Tools

To be able to evaluate vendor performance it is critical that the various evaluation tools be developed. The following tools are used in evaluating vendor contract progress:

- a) **Key performance Indicators (KPIs):** This is the obligations that if a vendor meets, an organization considers as important to the overall success of the organization. Before initiating procurement processes, an organization needs to identify what activities they consider most crucial to the success of the organization.
- b) **Procurement-Supplier Meetings:** Scheduled meetings between procuring organizations and vendors are an effective way of monitoring performance. Meetings between suppliers and procurers also help the two parties build relationships while performance is being monitored.
- c) **Technical review meetings:** These are meetings between procurers' technical team and the supplier's technical experts to review reports, performance results and come up with ways to improve processes.
- d) **Audits and long-term reviews:** Audits are very effective in determining the extent to which contracts are being adhered to as well as determining how to adhere to emerging change. This could also help to do an effective cost benefit analysis.
- e) **Spot checks:** These are important as they ensure that vendors adhere to the contract standards. Spot checks on vendors can either be announced or spontaneous, unannounced spot checks should however be included in the contract and not be frequent to maintain trust.
- f) **Contract reports:** When signing contracts with vendors, it is important to include performance as one of the deliverables. This acts as a monitoring tool.

### Sample of vendor performance evaluation form

|                                                                                                 |                               |                    |                    |
|-------------------------------------------------------------------------------------------------|-------------------------------|--------------------|--------------------|
| Contract Name _____                                                                             |                               | Description _____  |                    |
| Purchasing representative _____                                                                 |                               | Department _____   |                    |
| Vendor Name _____                                                                               |                               | Address _____      |                    |
| Contact Name _____                                                                              |                               | Email: _____       |                    |
| Check One: Final evaluation                                                                     |                               | Interim Evaluation |                    |
| Evaluation Criteria (including but not limited to)                                              | Evaluation Assessment         |                    | Evaluator Comments |
|                                                                                                 | Rating Category (see chart on | Score out of 10    |                    |
| Administration:<br>• Invoice accuracy<br>• Customer Service<br>• Communication (public & staff) | Exceptional                   |                    |                    |
|                                                                                                 | Good                          |                    |                    |
|                                                                                                 | Satisfactory                  |                    |                    |
|                                                                                                 | Cautionary                    |                    |                    |
|                                                                                                 | Not satisfactory              |                    |                    |

|                                                                                                                                      |                  |     |           |  |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----|-----------|--|
|                                                                                                                                      | Unacceptable     |     |           |  |
| Quality of Product<br>• Product Delivery<br>• Quality of product<br>• Communication                                                  | Exceptional      |     |           |  |
|                                                                                                                                      | Good             |     |           |  |
|                                                                                                                                      | Satisfactory     |     |           |  |
|                                                                                                                                      | Cautionary       |     |           |  |
|                                                                                                                                      | Not satisfactory |     |           |  |
|                                                                                                                                      | Unacceptable     |     |           |  |
| Timelines<br>Adherence to product delivery schedule                                                                                  | Exceptional      |     |           |  |
|                                                                                                                                      | Good             |     |           |  |
|                                                                                                                                      | Satisfactory     |     |           |  |
|                                                                                                                                      | Cautionary       |     |           |  |
|                                                                                                                                      | Not satisfactory |     |           |  |
|                                                                                                                                      | Unacceptable     |     |           |  |
| <b>Cost Control:</b><br>Number of Change Orders<br>Cost of Additional Service and/or Work<br>Compliance with Original Contract Price | Exceptional      |     |           |  |
|                                                                                                                                      |                  |     |           |  |
|                                                                                                                                      | Good             |     |           |  |
|                                                                                                                                      | Satisfactory     |     |           |  |
|                                                                                                                                      | Cautionary       |     |           |  |
|                                                                                                                                      | Not satisfactory |     |           |  |
|                                                                                                                                      | Unacceptable     |     |           |  |
| <b>Total Score</b>                                                                                                                   |                  | /70 | = _____ % |  |
| Overall comments                                                                                                                     |                  |     |           |  |
| Evaluator Name: _____ Signature _____                                                                                                |                  |     |           |  |

Supervisor \_\_\_\_\_ Name \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Purchasing \_\_\_\_\_ Rep: \_\_\_\_\_ Signature \_\_\_\_\_

I declare that I have completed this evaluation in a fair and honest manner. I further confirm that my judgment in completing this evaluation has not been influenced by any actual or potential "Conflict of Interest", as outlined in the laws and rules regulating Public procurement act.

| Rating |                  | Description of Rating                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10     | Exceptional      | Performance significantly exceeds Contract requirements to the County's benefit, for example, the Contractor implemented innovative or business process reengineering techniques, which resulted in added value to the County. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the Contractor were highly effective. |
| 8-9    | Good             | Performance meets contractual requirements and exceeds in some area(s) to the County's benefit. The contractual performance of the element or sub element being assessed was accomplished with some minor problems for which corrective actions taken by the Contractor were effective.                                                                                                                                      |
| 6-7    | Satisfactory     | Performance meets contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which proposed corrective actions taken by the Contractor appear satisfactory, or completed corrective actions were satisfactory.                                                                                                                                                     |
| 5      | Cautionary       | Performance did not quite meet contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which proposed corrective actions taken by the Contractor appear to be a continued minor concern, or completed corrective actions were slightly below satisfactory                                                                                                       |
| 3-4    | Not Satisfactory | Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious                                                                                                                                                                                                                                                                         |

|     |              |                                                                                                                                                                                                                                                                                              |
|-----|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |              | problem for which the Contractor has submitted minimal corrective actions, if any. The Contractor's proposed actions appear only marginally effective or were not fully implemented.                                                                                                         |
| 0-2 | Unacceptable | Performance does not meet contractual requirements and/or recovery is not likely in a timely or cost-effective manner. The contractual performance of the element or sub-element contains serious problem(s) for which the Contractor's corrective actions appear to be or were ineffective. |

**Figure 38: vendor performance evaluation form**

### **Techniques for measuring Vendor contract performance**

There are various techniques used in evaluating vendor performance such as

- Price-based metrics
- Quality-based metrics
- Cost based metrics

Many companies use a vendor evaluation tool that allows transaction data to be analyzed to give a comparison between vendors. The vendor evaluation uses criteria that have been determined by the purchasing or department to compare vendors such as:

- Price
- Delivery reliability
- Delivery date adherence
- Quality of the item

There are any numbers of criteria that can be used in a comparison and these are usually weighted so that important criteria are given more credence. For example, a company may decide that the quality of the items it receives from vendors is more important than price, which in turn is more important than delivery reliability. The company would then weight these criteria so that the overall score reflects that requirement.

### **1.2 Appoint Vendor Contract Progress Evaluation Committee as Per Workplace Policy**

Vendor evaluation committee is a group of people selected from the organization procurement department and other areas to provide reviews and criteria for evaluation of vendor's performance. They are useful in reviewing scope of work, purchase description/specification and development of evaluation criteria. They are used in measuring how well an offer or approach meets the needs of the requesting department or RFPs of performance requirements. It is equally important to keep a written record of all correspondence with the Vendor. If the Vendor's response or corrective action is still a concern, departmental staff should involve the Purchasing Department. Where it is deemed

appropriate an Interim Performance Evaluation should be performed by the Project Evaluator(s) and provided to the Vendor by the Purchasing department. The Vendor will be held responsible for the performance of its sub-contractors. If the Vendor's response or corrective action continues to be a concern, the terms and conditions of the contract regarding non-performance may be enforced by the Purchasing & Risk Manager.

**Duties and responsibilities of vendor evaluation committee**

- Establish the criteria and standards to be considered in the evaluation
- Agree upon scoring methods to be used in rating and ranking the performance
- Review the solicitation documents (Request for Bids or Request for Proposals)
- Review procedures to be used during the process.

**Procedures for appointing vendor evaluation committee**

- a) Clarify each member's role on the committee and establish a work plan and schedule that includes clear milestone dates.
- b) Appoint a chair for the committee who can be the procurement representative.
- c) Work out an acceptable workload arrangement with their supervisor in order to allow time for committee activities.
- d) Management must be supportive of all the arrangements so that committee members can adequately fulfill their evaluation duties.

**Vendor evaluation committee should include**

- Procurement officer who acts as the chair.
- Technical expert in the product or service being procured.
- Representative from accounts.
- Any other stakeholder that is affected by services and products being procured.

**3.3 Prepare and Circulate Notice for Vendor Contract Progress Evaluation Committee Meeting as Per Workplace Policy**

To effectively manage vendor performance, it is important have an open communication with the vendors throughout the project. The vendors should be informed in writing when their performance is being evaluated and if there are any concerns. A request for appropriate measures to be undertaken should be communicated in writing within an acceptable timeframe. This is done with reports generated from vendor contract progress evaluation process. The people involved in the evaluation of the vendors should be informed in time about the exercise.

### **1.3 Conduct Vendor Contract Progress Report as Per Workplace Policy**

Conducting a vendor performance report is a key process and important in supporting an effective purchasing and contracting function of an organization. Vendors need to be monitored and evaluated to ensure that timely receipt of supplies from vendors, completion of assignment by consultants and complete execution of order by a vendor within scheduled completion period.

#### **Methods for conducting vendor evaluation**

**Step1:** Preparation of Performance Rating Data Sheet. In this step separate data rating sheet with the measurement parameters are prepared.

**Step 2:** Compute and grade vendor performance data as received.

**Step 3:** Initiation measures. Depending on results from the computing and grading corrective measures would be initiated by taking up the matter with the concerned vendor. The vendor is supposed to respond to the concerns based on the response the vendoring committee and decide the next course of action.

**Step 4:** Implementation of Corrective Measures

Develop an outline with the vendor of how the corrective measures will be implemented.

### **3.5 Prepare Vendor Contract Progress Report as Per Work Policy**

The last step in the evaluation process is the preparation of an evaluation report, which will later be used as the basis for the recommendation of award. The following sections are included in a vendor contract progress report:

- a) An executive summary of the evaluation process.
- b) Steps used in evaluation.
- c) Clarification of any invalidation, rejection, non-compliance, and clarification of offers should be stated, including a list with the final ranking of the offers and the reasoning on how the best offer was selected.
- d) Signature section for evaluation team to sign on the report.
- e) A declaration of on conflict of interest of the members of the evaluation team.

#### **Dissemination of vendor contract report**

Vendors can be evaluated and results may indicate poor performance. In such instances, some strategies may be important to help deal with this. When vendors have been found to perform poorly, it is important to;

- Hold progress meetings and reviews to identify.
- Come up with problem solving techniques that would result in an improved action
- Use contracts that include legal action.
- When the performance is very poor and there are no signs of improvement, it is always wise to terminate the contract.

It is important to have open communication with the vendor throughout the project and to inform the vendor in writing when their performance is a concern and to request appropriate corrective actions within an acceptable timeframe, in accordance with the Solicitation's terms and conditions. It is equally important to keep a written record of all correspondence with the vendor. If the vendor's response or corrective action is still a concern, departmental staff should involve the Purchasing Department. Where it is deemed appropriate an Interim Performance Evaluation should be performed by the Project Evaluator(s) and provided to the Vendor by the Purchasing department. The Vendor will be held responsible for the performance of its sub-contractors. If the Vendor's response or corrective action continues to be a concern, the terms and conditions of the contract regarding non-performance may be enforced by the Purchasing & Risk Manager. Results obtained from vendor performance evaluation can become less useful with time. It is therefore suggested that individuals should share the information immediately or with a timeframe of not less than 7 years. Dissemination of vendor performance is significant in making decisions in an RFP process as well as identifying reliable vendors for the company.

### **3.6 Terminate Non-Performing Vendor Contracts as Per Legal Requirement as Per Standard Operating Procedures**

A contract can be terminated prior to completion of a project or prior to the expiration of a contract period term due to Vendor performance issues. However, it is important for careful decision to be made during vendor termination as this might affect overall performance of the organization in meeting its goals. The following steps can be used in vendor termination:

#### **a) Be sure of need to terminate the contract**

One need to be very sure that the vendor relationship cannot continue. This can be done by appointing an independent person to evaluate the performance of the vendor. The vendor should have been informed on areas of improvement and failed to act on them. There must be evidence that the vendor has breached the contract in delivering what was required.

#### **b) Conduct a cost benefit analysis**

Ask yourself what are the risks of terminating the contract and what could be the benefit. If the risks are more than benefit then consider not to terminate the contract.

#### **c) Work out what/who will replace the vendor**

When a strategic vendor agreement goes wrong, the stress and emotional strain can dominate your thoughts. However, unless you find a new way of getting the service delivered (whether in-house, via an alternative strategic partner or a combination of both) and undertake appropriate due diligence on it, then there is no guarantee that you will be better off once you've exited the relationship. One of the best uses of your time ahead of termination is therefore to consider what 'good looks like' for the service delivery once you've terminated, whether that also involves bringing the services in-house or

transitioning to another vendor. In either case, you need to begin preparation and have completed your due diligence before you terminate, to smooth the handover process and minimize the risk.

**d) Plan your exit**

Getting out of a relationship is as much of a project as is getting in, but with potentially more operational and financial risks. A well-considered exit plan allows you to identify what you will need to make a successful transition. There are many issues that often get missed during the exit process, so a proper plan will ensure you cover these off too, minimizing the potential for disruption. You can use the business plan created in step 3 to measure the progress of your exit and ensure everything is proceeding as intended.

**e) Prepare your evidence**

Most vendors will not like their contracts terminated. Termination can get messy and cause a lot of time wastage or even court cases. To avoid messy termination and court cases one is required to prepare their evidence on non-performance of the vendor. Focusing on the right element is important. One would use the contract issued while awarding the tender and evaluation report from an independent party. A report advising vendors on how to improve the service is also a good evidence if the vendors did not implement it.

**f) Sanity check your evidence**

Once you've gathered your evidence, the next step is to evaluate whether it shows what you thought it would and that it's strong enough to proceed. Evidence is often imperfect. At the end of this stage you should know whether or not it shows, on balance, that the vendor delivered to your expected business outcomes (not necessarily just to their contractual KPIs, which may not align with your business outcomes). You will also be clear whether you have interpreted vital elements of your evidence correctly, such as your vendor's expert responsibilities and how they should be benchmarked against what is reasonable. The safest and most cost-effective way to check your evidence is to have someone independent undertake a 'critical friend' challenge, so they can advise you of what works, what doesn't and where your focus of evidence should be, according to the business outcomes you are trying to achieve.

**g) Choosing the right forum for your termination**

Different forums are used in contract termination

- Negotiations & mediation
- expert determination
- Arbitration or litigation.

Each has advantages and disadvantages, depending on what you are trying to achieve. Selecting the right forum can significantly reduce your costs and speed up the process. There is little point proceeding directly to litigation if a less formal and lower cost process can achieve your goals.

#### **h) Negotiating the termination and exit with your vendor**

Negotiating a termination and exit of a strategic relationship is challenging and emotions often run high on both sides. However, there are steps you can follow which will smooth the process and increase your chances of a successful outcome. In particular, if your vendor has breached both its express contractual KPIs and its expert responsibilities, and you have had the evidence independently validated, then the negotiation process will be much swifter.

Setting out your arguments clearly, with solid and independently validated evidence, will help your vendor to understand that it will cost them more to resist the termination and exit than it will to comply, agree and support the process. Always be sure to align your termination and exit negotiation strategy with the written contract terms, and always seek independent and qualified advice in respect of formal termination. Damages for adopting the wrong termination and exit procedure can be penal.

#### **i) Managing the exit process**

Once you have formally terminated the relationship, you need to treat the exit process as a key project in its own right. As with any project, it must have resources allocated to it, external and internal support, key milestones, objectives, payment profiles and performance targets to be met. Governance and performance management are critical to a successful termination and exit process. Make sure you give it the time and attention it needs.

#### **j) Seek legal and technical support**

Many organizations need independent support when terminating a contract, to avoid the potential financial damages that a vendor can claim if the contract is terminated incorrectly. It is therefore vital to choose the right lawyer and technical expert, instruct them properly and to manage their output, so you get the outcomes you want and achieve value for money. The right lawyer or technical expert can add considerable value by keeping the focus of your evidence right, speeding up the process and minimizing all costs (including their own). They will help you to avoid mistakes that will undermine your position and give you the support and independent perspective you need to successfully pursue your case.

### **Conclusion**

The learning outcome covered vendor contract performance with the aim of imparting knowledge to the learner on ways of identifying early signs when the vendor is not adhering to the set terms and conditions. The unit also covers interventions one should seek before termination of the contract such as increased monitoring.

## Further Reading



Weber, C. A. (1996). A Data Envelopment Analysis Approach To Measuring Vendor Performance. *Supply Chain Management: An International Journal*, 1(1), 28-39.

### 6.3.4.3 Self-Assessment



#### Written assessment

Seven multiple choice questions

1. Which of the following is a KPI in Vendor performance evaluation?
  - a) Price.
  - b) Time of delivery.
  - c) Number of free deliveries.
  - d) Vendors region.
2. Three of the tools listed below are not used in Vendor performance. Which one is?
  - a) Gantt chart.
  - b) Benefits management platform.
  - c) Payroll service.
  - d) KPI.
3. Which of the following is not a strategy to managing poor performance?
  - a) Hold progress meetings.
  - b) Ignoring small mistakes.
  - c) Come up with problem solving techniques.
  - d) Terminate contract.
4. Which of the following is not considered in the vendor performance checklist?
  - a) Product
  - b) Rapport
  - c) Delivery
  - d) Customer service
5. Which of the following is not an importance of vendor contract performance evaluation?
  - a) Helps organizations to be strategic in their relationship with vendors.
  - b) It develops supply chain management strategies.
  - c) It helps vendors to improve their performance.
  - d) It allows organizations to receive discounts.

6. Explain two importance of vendor contract performance evaluation.
7. Discuss the various considerations one should make before terminating a contract.
8. Describe three main tools used in vendor performance evaluation.
9. Explain some of the criteria used by vendor evaluation committee during vendor performance evaluation.

#### **Oral Assessment**

1. What are the main procedures for terminating a non performing contract performance?
2. Explain the main components of a vendor progress report.
3. Why is it important to evaluate vendor contract performance?

#### **Practical Assessment**

Company XYZ issued Kilu general supplies a tender to supply books in public secondary schools in Eastern region. You have been contracted to evaluate Kilu contract performance.

- a) Prepare a document showing the procedures you will apply to evaluate Kilu contract performance.
- b) Outline the key parameters that you will use in measuring vendor contract performance of Kilu generals.
- c) Develop the tool you will use in this vendor contract performance evaluation.
- d) Prepare an outline of a evaluation progress report.

#### **6.3.4.4 Tools, Equipment, Supplies and Materials**

- Direct instruction
- Role play
- Case studies
- Field trips
- Discussions
- Demonstration by trainer
- Practice by the trainee
- Simulation

#### **6.3.4.5 References**



Talluri, S., Narasimhan, R., & Nair, A. (2006). Vendor Performance with Supply Risk: A chance-constrained DEA approach. *International Journal of Production Economics*, 100(2), 212-222.

Weber, C. A. (1996). A Data Envelopment Analysis Approach to Measuring Vendor Performance. *Supply Chain Management: An International Journal*, 1(1), 28-39.

Xu, J., Li, B., & Wu, D. (2009). Rough Data Envelopment Analysis and its Application to Supply Chain Performance Evaluation. *International Journal of Production Economics*, 122(2), 628-638.

## **CHAPTER 7: ORGANIZATIONS ASSETS DISPOSAL/DISPOSE ORGANIZATIONAL ASSETS**

### **7.1 Introduction**

Organizations assets disposal is a core unit of competence for TVET level 6 qualifications for supply chain. This unit covers knowledge, skills and behavior for the disposal of surplus, unserviceable obsolete and obsolescent assets in an organization. It also involves identifying assets for disposal, classifying assets for disposal, executing disposal orders and preparing disposal certificate. All this takes place in the supply chain sector. Its main elements are monitoring the progress of procurement contracts, classifying assets for disposal, executing disposal orders and preparation of disposal certificates. Asset disposal allows an organization to keep track of their assets, by appointing a disposal committee which is in charge of the organizations asset disposal and being up to date with the current market trends.

The critical aspects of competency to be covered includes: verified list of unserviceable, obsolescent, obsolete or surplus assets, understanding of asset disposal and legal framework, knowledge of stakeholders and their role in asset disposal, knowledge of asset disposal method, prepared and disseminated schedules for asset disposal to relevant stakeholders documented and maintained asset disposal documents. The basic resources required include; computer, stationery, classroom and classroom resources, the constitution of Kenya 2010, public procurement and asset disposal Act 2015 and its regulations, public officer Ethics Act, Anti-Corruption and Economics Crimes Act 2003, Public Finance Management Act 2012, supplier's manual and sample procurement documents. The unit of competency covers four learning outcomes. Each of the learning outcome presents: how to monitor progress of procurement contracts, classification of assets for disposal, execution of disposal orders and preparation of disposal certificates, thus creating trainees with an opportunity to demonstrate knowledge and skills in the occupation standards and content in curriculum. Information sheet provides definition of key terms, content and illustration to guide in training. The competency may be assessed through written test, demonstrations, practical assignment, oral questioning and case study. Self-assessment is provided at the end of each learning outcome. Further reading is recommended.

### **7.2Performance Standards**

Organizations asset disposal monitors progress of procurement contracts, classify assets for disposal, execute disposal orders and prepare disposal certificate as per the workplace policy and legal requirement and the SOP guide.

### **7.3 Learning Outcomes**

#### **7.3.1 List of learning outcomes**

- a) Prepare list of assets for disposal
- b) Classify assets for disposal
- c) Execute disposal orders
- d) Prepare disposal certificate

### 7.3.2 Learning Outcome No 1: Monitor progress of procurement contracts

#### 7.3.2.1 Learning Activities

| Learning Outcome No 1: Monitor progress of procurement contracts                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--|
|  Learning Activities                                                                                                                                                                                                                                                                                                                                                                                                    | Special Instructions                                                             |  |
| 7.1 Receive notification of unserviceable, obsolescent, obsolete or surplus assets from user departments.<br>7.2 Verify list of unserviceable, obsolescent, obsolete or surplus assets based on organization's needs and technological dynamics as per workplace policy.<br>7.3 Appoint a disposal committee as per legal requirement.<br>7.4 Assess assets to be disposed as per standard operating procedures based on legal requirement.<br>7.5 Prepare an assessment report as per workplace policy. | Case study.<br>Provide sample assessment report for the trainees to familiarize. |  |

#### 7.3.2.2 Information Sheet No7/LO1: Organization Asset Disposal/Dispose Organizational Asset



##### Introduction

This learning outcome will train on skills, knowledge and behavior to receive notification of unserviceable, obsolescent, obsolete or surplus assets from user departments. It will also expose the trainee on how an assessment report is prepared and assessed

##### Definition of Key Terms

**Asset:** A valuable item that an organization owns.

**Obsolescent:** Is the process where the value of an item declines.

**Unserviceable:** Not worth to services or cannot be serviced.

**Obsolete:** An item that is obsolete is one that is out of date or no longer needed.

**Surplus:** This is the amount of materials or goods that will remain after requirement have been met.

## **Content/Procedures/Methods/Illustration**

### **1.1 Receive notification of unserviceable, obsolescent, obsolete or surplus assets from user department**

#### **Notification of asset disposal**

Due to high technological change, large numbers of machines mostly become obsolete on a regular basis and most machines have no residual value after some period of time. The concerned department will therefore carryout assessment and notify the organization on the obsolete machines to be disposed of. That department will use tendering process to dispose the goods.

#### **Procedures for tendering disposal of assets**

- a) The head of entity should approve the assessment recommendation giving full details and specification for the items offered for tender.
- b) The tenders should be advertised to the public by the entity according to the level of exposure and the organizations policy requirements.
- c) Tenders should be submitted by interested parties to the entity's tender box. Those tenders should be held until the closing date of the tenders.
- d) Tenders should be opened by tender committee. The tender evaluation committee should consist of the relevant departmental heads according to the entity's policy requirements.
- e) The details of each quotation are verified and recorded. The evaluation is then carried out and results recorded.

If departments believe that they have justifiable reason to dispose equipment without following the laid down procedures and policy of the organization, then approval must be obtained from top management. The department should draft a written justification explaining the reasons why they should receive an exception from top management.

## 1.2 Verify List of Unserviceable, Obsolescent, Obsolete or Surplus Assets Based on Organization's Needs and Technological Dynamics

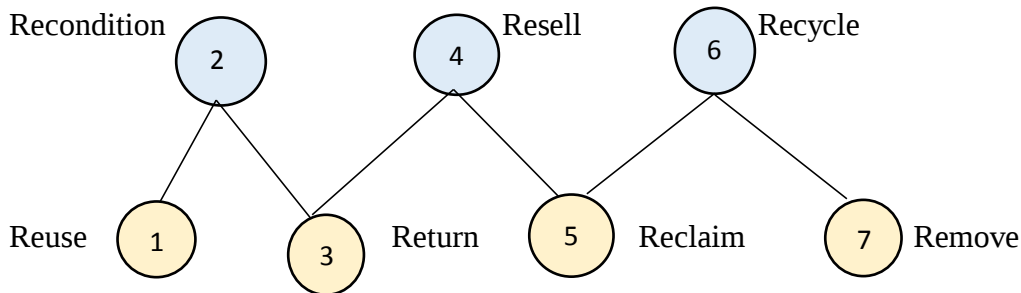
### Disposal process flow chart

#### Action checklist

- |                                       |                                                                                                                                                                   |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Decision to dispose of goods       | - consider if goods are obsolete, surplus or at optimum.<br>Selling time.                                                                                         |
| ↓                                     |                                                                                                                                                                   |
| 2. Undertake valuation                | -Establish reference point<br>-Undertake valuation of goods                                                                                                       |
| ↓                                     |                                                                                                                                                                   |
| 3. Identify disposal options          | -Consider all disposal options; transfer to another<br>Procurement entity, invite competitive offers or<br>carryout, public auction.                              |
| ↓                                     |                                                                                                                                                                   |
| 4. Evaluate disposal options          | -Carryout cost benefit analysis of each disposal<br>option.                                                                                                       |
| ↓                                     |                                                                                                                                                                   |
| 5. Select preferred disposal option   | -Examine cost and benefit by evaluating the type and<br>condition of goods, offers from other entities, the<br>nature of recipient market and time and resources. |
| ↓                                     |                                                                                                                                                                   |
| 6. Prepare goods for disposal         | -Ensure that goods are cleared of material unfit for<br>Disposal.<br>-Perform any necessary repairs.<br>-Store goods on a secure location.                        |
| ↓                                     |                                                                                                                                                                   |
| 7. Dispose of goods                   | -Manage and monitor those undertaking the disposal.<br>-Record the goods in asset register.                                                                       |
| ↓                                     |                                                                                                                                                                   |
| 8. Treal revenue from disposal<br>the | -Deal with as per finance administration account of<br>Organization policy.                                                                                       |
| ↓                                     |                                                                                                                                                                   |
| 9. Review disposal process<br>goals.  | -Evaluate performance against organization disposal<br>-Seek continuous improvement.                                                                              |

### **Methods of asset disposal**

Disposal of assets takes various techniques and companies use their own version to dispose assets. However, we will talk about the most commonly used methods of disposing assets. One of the commonly used method is 7R'S technique illustrated in the figure below.



- a) **Reuse:** This method is also called redeploying. It is the most rewarding option for a company. It is the relocation of goods to another department within the company.
- b) **Recondition:** This is the refurbishing and putting used machines and equipment back into service. It is less expensive than buying new equipment's.
- c) **Return:** This method involves taking back the goods to the original seller or manufacturer and exchanging them for cash or credit value.
- d) **Resell:** It involves selling idle assets in the open market to resellers. Auction platforms are good examples that are used to sell obsolete machinery and spare parts.
- e) **Reclaim:** Also known as investment recovery. It is the process of recovering assets in a responsible environment.
- f) **Recycle:** It is the sale of obsolete or underperforming assets to return the capital to invest in new assets.
- g) **Remove:** It is the method of sending the surplus assets to the landfills at the expense of the company. It entails throwing or dumping outdated items from the warehouse or store.

### **Reasons for disposing assets**

Companies dispose assets because of various reasons. The following are some reasons of disposing assets:

- Maximize return on investment of your industrial equipment.
- Free up warehouse space.
- Green industrial - CSR reporting benefits.

### **Health and safety in asset disposal**

Organizations and entities should ensure health and safety of stakeholders and all those participating in asset disposal. This can be achieved by preparing health and safety note

where participants will sign, this will exonerate the company from any liability that arises from asset disposal exercise.

The following is an example of health and safety notice:

“The organization will not be liable for any health and safety issue that may arise out of the use of disposed equipment. It is the recipient’s responsibility to ensure that the item is suitable and safe for intended use, positioned correctly and that it can be used without causing health and safety risks. It is the recipient’s responsibility to obtain all relevant instructions pertaining to the installation and use of equipment. It is the recipient’s responsibility to carry out or have competent persons to carry out all necessary checks and appropriateness of the goods. The organization will not be liable for any loss or damage or injury that arises out of the installation, use or handling of the items, however caused.”

This safety and health notice will act as a disclaimer and will safeguard the organization against any legal suits that recipient fill. it is therefore very necessary to have the recipient sign this document before they take the equipment.

### **1.3 Appointment of Disposal Committee as Per Legal Requirement**

#### **Appointment of disposal committee**

The board members of the company should establish asset disposal committee comprising of the following:

- A chairperson who should be a head of department.
- The head of finance function.
- At least three heads of user departments of which one of them should be head of disposal department.
- The head of procurement function.

Where necessary the disposal committee may engage a relevant technical expert in the process of carryout its functions. In most cases the quorum for the disposal committee members should be three members including the chairperson.

### **1.4 Asses Assets to Be Disposed as Per Legal Requirements**

#### **Assessment of assets to be disposed**

The disposal committee will carry out on assessment on the assets to be disposed. The committee will verify all the existing assets of the organization. The committee should carry out the assessment while making reference to the organizations laid down procedures and policy requirements.

#### **Conditions that assets should meet before disposal**

- When the asset no longer meets the current technological requirement.
- When it has clearly been established by the head of departments that there is no further business need for the equipment.
- When it no longer functions and its repair cost are very high.

- When It is established that retaining the legal title over items under custody of implementing partner is no longer in best interest of the organization.

### **1.5 An assessment report is prepared as per workplace policy**

The supply chain process involves 5 steps i.e.

- Plan.
- Develop (source).
- Make demanded products.
- Deliver.
- Return.

An assessment report may be written regarding any of the 5 steps. These reports help an organization to keep track of the progress of the process. Reports are essential in maintaining the high levels that many clients expect.

### **Conclusion**

In conclusion, this learning outcome has trained on skills, knowledge and behavior to receive notification of unserviceable, obsolescent, obsolete or surplus assets from user department. The unit will have covered how to verify list of unserviceable, obsolescent, obsolete or surplus assets based on the needs and technological dynamics of the workplace.

### **Further Reading**



Gichio, D., (2014). Public procurement in Kenya.

### **7.3.2.3 Self-Assessment**



#### **Written assessment**

1. Which of the following is not a method of asset disposal?
  - a) Purchase.
  - b) Resell.
  - c) Reuse.
  - d) Recycle.
2. “The asset disposal committee is drawn from logistics and procurement departments” this statement is;
  - a) True.
  - b) False.

3. What is the minimum quorum of disposal committee?
  - a) 3
  - b) 5
  - c) 15
4. Which of the following is not a reason for asset disposal?
  - a) Free up warehouse space
  - b) Corporate social responsibility
  - c) Maximize return on investment
5. Which of the following is not a health and safety in asset disposal?
  - a) Preparation of health and safety not.
  - b) Keeping the assets for disposal in a tidy and clean area
  - c) Drafting of disclaimer note
  - d) All of the above
6. State two methods of asset disposal in an entity?
7. Enumerate three reasons why organization dispose assets?
8. What does 'recycling' mean according to asset disposal management and waste management philosophy?
9. Who is responsible for tender box opening when carrying out asset disposal in an entity?
10. What are some of the legal frameworks of asset disposal and related laws in Kenya?

### **Oral Assessment**

1. What are some of the criteria that equipment should meet before disposal?
2. What are the procedures to be followed when tendering asset disposal in an entity?

### **Practical Assessment**

1. Assume you are supply chain expert. An organization engaged you to sensitize the staff on the importance of asset disposal. What recommendations will you give?
2. An entity is contemplating to dispose assets without following the policy and procedures requirements. As a supply chain expert what advice would you have given the organization?
3. A company was sued by a beneficiary who received an equipment from the company through asset disposal tendering. The beneficiary explained to the court that he/she bought the asset from the organization but after a few days the item caused fire in his/her house. What do you think the organization can use to win this case against the complainant?

#### **7.3.2.4 Tools, Equipment, Supplies and Materials**

- Computers.
- Classroom and classroom resources.
- The constitution of Kenya 2010.
- Public Procurement and Asset Disposal Act 2015 and its regulations.
- Public Officers Ethics Act.
- Anti-Corruption and Economic Crimes Act 2003.
- Public Finance Management Act 2012.
- Suppliers Manual.
- Sample Procurement Documents.

#### **7.3.2.5 References**

Chambers, R. (2006). Vulnerability, coping and policy (editorial introduction).

Dolfsma, W. (2008). *Knowledge economies: organization, location and innovation*.  
Routledge.

Gichio, D., (2014). Public procurement in Kenya.

### 7.3.3 Learning Outcome No 2: Classify assets for Disposal

#### 7.3.3.1 Learning Activities

| Learning Outcome No 2: Classify assets for Disposal                                                                                                                                                                                                                                                                                                                            |                     |                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                               | Learning Activities | Special Instructions                                                                     |
| 2.1 Identify Serviceable/surplus assets and categorized as per the SOP.<br>2.2 Identify Unserviceable assets and categorized as per the SOP.<br>2.3 Identify Obsolete and obsolescent assets and categorized as per the SOP.<br>2.4 Prepare a classification report and recommendation for suitable methods of assets disposal as per workplace policy and legal requirements. |                     | Role play among groups.<br>Visit a manufacturing firm and list the unserviceable assets. |

#### 7.3.3.2 Information Sheet No7/LO2: Classify Assets for Disposal



##### Introduction

This learning outcome will train on skills, knowledge and behavior to identify serviceable, obsolete, obsolescent assets and classify them as per workplace policy, sop and legal requirements. It will cover methods of preparing classification report and recommendation for suitable methods of assets disposal.

##### Definition of Key Terms

**Serviceable:** Can be serviced or repaired.

**Surplus:** This is the number of items or goods that will remain after requirements have been made.

**Unserviceable:** This is when equipment is not worth to service or cannot be serviced.

**Obsolete:** An item is said to be obsolete when it is out of date or no longer needed.

**Obsolescent:** This is the process where the quality and value of an item declines.

**SOP:** This stands for Standard Operating Procedures.

##### Content/Procedures/Methods/Illustrations

#### 2.1 Identification and Categorization of Assets

Because of increasing public expectation and continuous emergence of new technology, companies are required to improve their efficiency. They are required to provide services at acceptable level in terms of quality and cost effectiveness. As an input, government entities and private companies should hold fixed assets and other equipment that facilitates production of essential products efficiently and effectively. The intention of possessing such assets is not for furnishing an organization or government or their department but

helps organization run its business in effective and efficient manner since it is impossible to achieve the intended goal without these assets (GASB, 2003, MOFC-D 2009). Therefore, to establish expected benefits from such assets, efficient and effective equipment management system is vital. This is because the asset management system will enable to identify those items that are no longer needed so that they are disposed of. This will help clear some space for new equipment and serviceable items.

#### **Advantages of identifying serviceable and unserviceable material**

- **It facilitates disposal functions:** This is because the materials will be handled and categorized separately.
- **Removing materials on time:** Once identified and categorized, the organization will know when to remove the items from the warehouse.
- **Saves time for disposal committee:** The identification and categorization will save the disposal committee a great deal of time and make their task easy and achievable.
- **Helps in planning:** When the organization is aware of the number of equipment that require service, they will allocate resource of services. This will enhance the efficiency of management.

#### **2.2 Disposal of unserviceable materials**

Effective management and prompt measures on the growing quantity of no longer serviceable materials reduces challenges faced by disposal committee. Disposing the unserviceable equipment promptly ensures safety and health within the organization. For this reason, all the unserviceable materials should be disposed of the soonest possible. According to MOFC-D (2011), removing unusable items is environmentally friendly and fiscally accountable way on time reduces work burden and health and safety problems and enables the organization to gain return and utilize space economically. Generally, when items and equipment which are out of date are held by a company for a long period of time without taking timely measure, they will be exposed to damage and may bring or cause accidents on human beings as well as environment. Most importantly, those equipment on which huge amount of money was invested, will lose their value and depreciate considerably. This will therefore reduce return on investment if they are disposed on time (Warren and Kieve, 2005, Queensland Government Chief Procurement Office department of public works, 2010).

On the other hand, if wellbeing sensitive products like chemicals, medicine and food items that are out of date are not removed on time, they may cause health problems on storehouse or on warehouse workers and users, environment as well as living things in the surrounding areas.

The organization should have in mind that lack of timely disposal of unserviceable materials will disrupt their plans. This is because accumulation of unnecessary and unserviceable materials will occupy huge space of the warehouse. The organization may find itself incurring extra cost to avail more space yet had there been

proper disposal of unused items they would not have incurred this cost (Jones and White 2008).

### 2.3 Asset Classification Report

Asset classification is a system of assigning assets into groups based on number of common characteristics. Different accounting rules and systems are used and applied to each asset group within the asset classification system to properly account for each other group or category of assets. These groups of assets are then clustered for reporting purposes in the balance sheet.

#### Common assets classification

- a) **Cash:** Cash includes cash in checking accounts, petty cash and cash in deposit accounts. it is the money the company is using in its daily operations to purchase items and pay its creditors. Money can reduce in value but there is nothing like 'disposal of money' since it can always be exchanged from the bank. For this reason, cash is not among the assets for disposal.
- b) **Receivable:** Receivable includes trade receivable and receivables from employees. This is also money exchanged as a matter of business transaction and therefore It does not qualify for disposal.
- c) **Inventory:** Includes raw materials (inputs for production), work in progress and finished goods. When materials become out of use, they will be disposed.
- d) **Fixed assets:** Includes building, land, computer hardware, computer software, furniture and fixtures and vehicles. Movable items like computer hardware, furniture items and vehicles can be disposed when they become obsolete.

Two broader classifications of assets are current assets and long-term assets. Current assets are assets that will be used within one year while long term assets refer to all assets that will be used in more than one year. Examples of current assets includes cash in hand, cash in bank, inventory and receivable. Long term assets include building, land, vehicles, furniture and fittings.

### 2.4 Identification of Suitable Methods of Disposal

It is not always clear on when and how to dispose assets. However, there are various recommendations by different scholars who gave their best opinion on the identification of proper methods of asset disposal. There are many factors to be considered when identifying an appropriate method of asset disposal. This is because certain types of assets must be disposed in a particular way to maintain customer privacy and data security. The following factors call for prompt disposal of physical assets:

- The equipment is no longer working and cannot be sold.
- The equipment no longer supports the current needs of the organization.

- The equipment is old and no longer meets company standards and the current technological needs.

There are situations in which the identification of disposal is not obvious as those listed above. For instance, the equipment may be running sluggishly or breaking down frequently and forcing the company to pay for the repairs. The cost of replacing this machine may seem too much. However, by calculating the amount of time and money spent repairing the machine, you will notice the cost of replacement is much less than maintaining the old and inefficient machine. This is mostly evidenced when the machine breaks down in the midst of important operation thereby forcing the employees from completing their jobs efficiently and timely. In such cases, the equipment should be sold either as a whole or in parts so that the proceeds can be topped up to purchase new and more reliable equipment.

### Conclusion

In conclusion, this learning outcome has trained on skills, knowledge and behavior to identify serviceable, unserviceable, obsolete, obsolescent assets and clarify them as per workplace policy, sop and legal requirements.

### Further Reading



Waspharcode.com/buzz/asset-disposal/  
<https://www.csir.res.in>

### 7.3.3.3 Self-Assessment



#### Written assessment

1. Which one of the following is not an advantage of identifying unserviceable items in the warehouse?
  - a) It facilitates disposal functions.
  - b) Saves time for disposal committee.
  - c) Increases cost of the organization.
2. Which of the following equipment will put the health of employees at risk if not disposed immediately, when they are out of use?
  - a) Chemical.
  - b) Drinking water bottle.
  - c) Laptop.

3. Removing obsolete items on time is a good practice of asset disposal and management
  - a) True.
  - b) False.
4. Technological changes render some equipment out of use
  - a) True.
  - b) False.
5. Which of the following is not a current asset?
  - a) Inventory.
  - b) Cash.
  - c) Receivables.
  - d) Vehicles.
6. State 2 benefits of identifying out of date assets early.
7. Highlight three factors that call for immediate disposal of unserviceable assets.
8. Define obsolescent equipment.
9. What are fixed assets?
10. Differentiate between long-term and short-term assets.

#### **Oral Assessment**

1. What are the criteria of disposing surplus items?
2. What is the procedure used to dispose an old and inefficient machine?

#### **Practical Assessment**

1. A company using an old photocopy machine uses sh.50, 000 to repair the machine every month. A new photocopy machine costs sh.500, 000. As a supply chain manager how would you advise the company?
2. Assume you are supply chain manager. The head of the company sought your advice on the correct disposal of medical drugs that are out of use. What advice would you give?
3. The committee of disposal of asset of a certain company found out that all the items in the warehouse are completely disarranged and some even placed on warehouse floor haphazardly. According to you, as a supply chain expert who do you think slept on their job?

#### **7.3.3.4 Tools, Equipment, Supplies and Materials**

- Computers.
- Stationery.
- Classroom and classroom resources.
- The constitution of Kenya 2010.
- Public Procurement and Asset Disposal Act 2015 and its regulations.

- Public Officers Ethics Act.
- Anti-Corruption and Economic Crimes Act 2003.
- Public Finance Management Act 2012.
- Suppliers Manual.
- Sample Procurement Documents.

#### **7.3.3.5 References**

Hastings, N. A. (2010). *Physical asset management* (Vol. 2). London: Springer.

Vernon, W. E. (2005). *U.S. Patent No. 6,922,687*. Washington, DC: U.S. Patent and Trademark Office.

Waara, F. (2008). Mitigating contractual hazards in public procurement: a study of Swedish local authorities. *Construction Management and Economics*, 26(2), 137-145.

### 7.3.4 Learning Outcome No 3: Execute Disposal Orders

#### 7.3.4.1 Learning Activities

| Learning Outcome No 3: Execute disposal orders                                                                                                                                                                                                                                                                                                                                                                                                 |                     |                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                               | Learning Activities | Special Instructions                                    |
| 3.1 Sought Authority to dispose (Organization Management, NEMA regulations. Public Health) is sought as per legal requirements<br>3.2 Prepare and disseminate Schedules for asset disposal to relevant stakeholders as per workplace policy guided by SOPs<br>3.3 Execute the actual disposal (Sale by tender. Donations, Waste Disposal Management, Sale by auction, Trade-in, Transfer to other entities) as per SOP and legal requirements. |                     | Activities may be carried out in groups or individually |

#### 7.3.4.2 Information Sheet No7/LO3: Execute Disposal Orders



##### Introduction

This learning outcome will help the learner to acquire skills and knowledge on executing disposal orders. The learner will train on how to seek authorization to dispose products, how to prepare and disseminate schedules for assets disposal and actual disposal execution.

##### Definition of Key Terms

**Assets disposal:** This is the act of a company or an organization selling off a long-term asset that has decreased in value e.g. machines, motor vehicles, etc.

**Execution of disposal orders:** This is the process that is used in giving authority for certain organizational assets to be sold, recycled or given out.

##### Content/Procedures/Methods/Illustrations

#### 3.1 Seek Authorities Responsible for Disposal of Assets

##### Identification of methods for assets disposal

Disposal of assets occurs for various reasons. The following could be reasons of why assets can be disposed:

- Required to be disposed of under a particular policy
- They are no longer required due to changed procedures functions or usage patterns
- They are occupying storage space and not being needed in the foreseeable future
- They have reached their optimum selling time to maximize returns
- They no longer complying with occupational health and safety standards
- They have been found to contain hazardous materials
- They are beyond repairing but able to be sold for scrap.

There are various methods that can be adopted for assets disposal in supply chain practice. The following are commonly practiced:

- i. Transfer to government departments or other public entities with or without financial adjustments.
- ii. Announce tender and sell the items to the public at a considerable price.
- iii. Sale through public action with a reserved price.
- iv. Destroy, dump or bury the items appropriately if they cannot be useful anymore.
- v. Recycling: Plastic equipment, metal, paper and glass can be easily recycled and sent back to their usable states.
- vi. Returning: This is taking back equipment or machines to the original manufacturers in exchange for money or on credit. This is only possible if manufacturers offer buy back solutions.
- vii. Refurbishing: This is putting back obsolete or used equipment and machine back to service. It is cheaper than buying.

The decision to dispose of assets should be carefully planned to allow a proper evaluation of options. The following are some of the consideration one should have:

- The type and condition of the surplus goods.
- Whether there have been any offers from other public authorities.
- The nature of the recipient market.
- Time and resource issues.
- The costs and benefits provided by each disposal option.
- Location of goods and their market value.

NOTE: Goods to be disposed of must be reported and subsequently removed from assets register.

**Table 1: Sample Template Assets Option Matrix**

| <b>Disposal Option</b>      | <b>Advantages</b>                                                                                                                                                                                                                                                                                                   | <b>Disadvantages</b>                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transfer                    | <ul style="list-style-type: none"> <li>• Achieves market price</li> <li>• Achieves value for money</li> <li>• Enables efficient disposal</li> <li>• Process is transparent</li> </ul>                                                                                                                               | <ul style="list-style-type: none"> <li>• May not achieve maximum price</li> <li>• Requires considerable effort</li> </ul>                                                                                                                                                                                                                           |
| Inviting Competitive Offers | <ul style="list-style-type: none"> <li>• Achieves value for money</li> <li>• Process is transparent</li> <li>• Process is open and competitive</li> <li>• Achieves maximum return</li> <li>• Tenderers may be vetted</li> </ul>                                                                                     | <ul style="list-style-type: none"> <li>• Resource intensive</li> <li>• Requires advertising</li> <li>• Delays may result from appeals or a failure to finalize purchase</li> </ul>                                                                                                                                                                  |
| Auction                     | <ul style="list-style-type: none"> <li>• Enables efficient disposal</li> <li>• Process is open and competitive</li> <li>• Achieves maximum return</li> <li>• Costs are known prior to disposal</li> <li>• Procurement entity uses minimal resources</li> <li>• Effective disposal for spare parts, scrap</li> </ul> | <ul style="list-style-type: none"> <li>• Requires transporting goods to auction</li> <li>• May take considerable time to dispose of goods or may be left with indisposed goods</li> <li>• Items may not be shown at real value</li> <li>• Buyers may enter into anti-competitive practice</li> <li>• No control over who purchases goods</li> </ul> |

**Seeking Relevant Authority to dispose**

The decision to dispose assets cannot be made independently without following a systematic process and seeking the required authorization from relevant bodies. The following are bodies that authorize disposal of assets in Kenya: The national treasury, public procurement regulatory authority, procurement administrative review board, director general's office, accounting officer, and procurement officer. In Kenya the Public Procurement and Assets Disposal Act commenced in January 2016. This Act provides procedures and for assets disposal by public entities.

**a) The national treasury**

The national treasury provides policy guidelines, describes and provides technical assistance for efficient procurement systems for the national and County Government. Formulates, evaluates, promotes and researches on national and county procurement and disposal policies.

**b) The public procurement regulatory Authority**

The PPRA monitors all public procurement systems, assesses and reviews disposal systems that ensure national values and the Constitutions are respected. It also has the role of ensuring that all functions are reported and presented to the Cabinet Secretary and county executives. The authority further ensures that all standards developed under the Acts are enforced and research on public procurement and assets disposal systems and advise the Cabinet Secretary on how to set standards on assets disposal.

**c) Public procurement administrative review board.**

They are responsible for determining the provisions to be made for capital and recurrent expenditure, they also oversee the management, control and administration of assets, approve policies of the Authority. The PPR board is also responsible for cooperating with other organizations undertaking functions similar to its own within and outside the country.

**d) Director General's Office**

This office acts as the Chief Executive Officer of the authority and secretary of the board. They hold office for a term of 3 years but are eligible for re-appointment. While in office, they are responsible for the day to day management of the affairs of the Authority and is answerable to the board.

**e) Accounting officer**

The accounting officers establish system procedures to facilitate systematic and structure decision making in procurement. They are also responsible for the public entity and ensure that they are compliant with the Act and set regulations. Accounting officers are to ensure that disposal plans are prepared and are compliant with the PPAD Act. They are to approve and sign all contracts while ensuring segregation of responsibilities. Accounting officers are to ensure that procurement is within the approved budget

**f) Procurement officer**

The procurement officer is responsible for :

- Giving professional advice to accounting officers.
- Prepare, publish and issue procurement opportunities and documents.
- Maintain and keep procurement and disposal records.
- Initiate procurement and disposal processes.
- Maintain contract records.
- Identify items for disposal.

**3.2 Prepare and Disseminate Schedules for Asset Disposal to Relevant Stakeholders as Per Workplace Policy Guided by SOP**

Asset scheduling is the listing of all assets within a company. Assets can be categorized into two major types: the fixed and non-fixed assets. The schedule for fixed assets disposal should contain the following details:

- a) The asset description.
- b) The net cost.

- c) Accumulated depreciation.
- d) Unique asset number.
- e) Gross cost.

Information above is written down; the salvage value may also be included for each fixed asset. The fixed asset schedule is used by organizations to verify the existence of these assets as well as their life value. For asset disposal, a depreciation schedule can also be used to show when and how much depreciation to put down, when to stop recording depreciation for fully depreciated assets in order to know which assets to stop using and which ones to replace.

### 3.3 Execute the Actual Disposal as Per SOP and Legal Requirements

Execution of assets is a systematic procedure used to ensure that identified assets are disposed based on the policy and regulation of the company. Various activities are undertaken to effectively dispose assets.

- i. **Establish a disposal Committee:** The employee in charge of unserviceable, obsolete and obsolescent goods establishes a disposal committee that will be comprised of procurement officer, accounting officer, human resource personnel and any other technical person with the knowhow on how to disposal.
- ii. **Preparation of technical disposal report:** A technical report is prepared on the items to be prepared. The report will indicate the real market price and set the reserve price for assets to be disposed.
- iii. **Review by disposal committee:** The disposal committee will conduct a survey and review the items to be disposed. This meeting will also put in consideration the technical report for disposal.
- iv. **Disclosure of disposal and reserve prices:** After the committee is in agreement on the items to be disposed and the reserve prices. The organization goes ahead to announce tender, auction of disposal of the assets to the public or to a transfer organization.
- v. **Seek approval for disposal:** The officer in charge of disposal will seek approval for disposal of the items from relevant parties. This will involve obtaining signed consent from top management, PPRA for the case of public sector and any other authorities as stipulated in the organization assets disposal regulations.
- vi. **Invite interested parties to purchase the assets (In case of sales).**
- vii. **Document the sales** from the sales and prepare transfer documents where necessary.

### Conclusion

At the end, the learning outcome will have covered the authority to dispose, legal requirements and schedules for asset disposal disseminated to relevant stakeholders as per workplace policy guided by SOPs. There exist several ways of organizational asset disposal

according to the Procurement Act. Different organizations have different equipment, machine and fixed assets which may need to be disposed from time to time and it is important to adhere to the SOP set standards. It is also crucial that organizations consider ways of disposal that are less costly and are SOP acceptable while following the right guidelines.

### Further Reading



OECD principles for integrity in public Procurement, 2009  
Public procurement and disposal manual guidelines, 2016

### 7.3.4.3 Self-Assessment



#### Written Assessment

1. Which of the following is not a method of asset disposal?
  - a) Recycling
  - b) Fabrication
  - c) Retirement
  - d) Sale
2. What do you think should be considered in asset scheduling?
  - a) Time of schedule.
  - b) Method of asset disposal.
  - c) Accumulated depreciation.
  - d) Procurement act.
3. Which among this is not responsible for asset disposal?
  - a) Auditor general
  - b) Accounting officer
  - c) Procurement officer
  - d) National treasury
4. Which statement best describes the term disposal?
  - a) Giving out public property.
  - b) Exchanging valued property with a different entity.
  - c) Selling of a machine to make profit.
  - d) Getting rid of an organizational machine or equipment that has decreased in value.

5. Which of the following is not a function of the public procurement regulatory authority?
  - a) Reviewing
  - b) Assessment
  - c) Monitoring
  - d) Overseeing
6. Explain the main process of asset disposal?
7. Discuss the importance of establishing an assets disposal committee?
8. Describe benefits of two methods of asset disposal?
9. Highlight five main considerations by an organization before assets disposal?
10. Why is assets disposal important in an organization?

#### **Oral Assessment**

1. Which two methods are common in assets disposal in Kenya?
2. Who should be involved in assets disposal?
3. Which are the main authorities to approve assets disposal?

#### **Practical Assessment**

1. You have been appointed the assets disposal officer for a motor vehicle company.
  - a) Describe the process you will use in identifying assets for disposal.
  - b) Clearly elaborate methods and process you will use in disposing of the identified assets.
  - c) Prepare an asset disposal technical report for the exercise.

#### **7.3.4.4 Tools, Equipment, Supplies and Materials**

- Computers.
- Stationery.
- Classroom and classroom resources.
- The constitution of Kenya 2010.
- Public Procurement and Asset Disposal Act 2015 and its regulations.
- Public Officers Ethics Act.
- Anti-Corruption and Economic Crimes Act 2003.
- Public Finance Management Act 2012.
- Suppliers Manual.
- Sample Procurement Documents.

#### 7.3.4.5 References



- Khi, V.T., (2016). International Public Procurement Innovation and Knowledge Sharing.  
Singer USA
- Martin, C., (2013). Logistics and Supply Chain Management. 4<sup>th</sup> ed. Pearson Harlow.
- Nicholas, A., John, H., (2009). Physical Assets Management.

### 7.3.5 Learning Outcome No 4: Prepare disposal orders

#### 7.3.5.1 Learning Activities

| Learning Outcome No 4: Prepare Disposal certificate                                                                                                                                                                                              |                     |                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------|
|                                                                                                                                                                 | Learning Activities | Special Instructions                              |
| 5.1 Document disposal orders as per legal requirements and SOP.<br>5.2 Ratified (Simple representation, Endorsements) as per the legal requirements.<br>5.3 File and maintain disposal documents as per workplace policy and legal requirements. |                     | Activities may have carried by oral presentation. |

#### 7.3.5.2 Information Sheet No7/LO4: Prepare Disposal Certificate



##### Introduction

The learning outcome will train on skills, knowledge and behavior to document ratify, file and maintain disposal orders as per workplace policy and legal requirements.

##### Definition of Key Terms

**Ratification:** This is the process of making a contract or agreement officially valid by signing or giving formal consent.

**Endorsement:** This is statement or action made which shows support or approval of something.

##### Content/Procedures/Methods/Illustrations

#### 4.1: Documentation of Disposal Orders

Documentation of disposal orders is an important part of management of records. It is done in order to retain records that are needed for future reference and destroying of unwanted ones.

##### Procedures of documenting disposal orders

- Records are first identified for disposal actions. This is done to differentiate the unwanted documents from the wanted ones.
- The decision of disposing the orders is confirmed and verified so that one does not end up disposing the unwanted documents.
- The unwanted documents are then categorized and packed in a designated place.

### **Advantages of documenting disposal orders**

- It helps one to find and retrieve information quicker and easier since it will take less time to search for the documents.
- It will minimize storage costs incurred by using only small space in the store and retain the records for longer period.
- Keeps continuing value records are identified and can be managed appropriately.
- It supports compliance with regulatory requirements for example, if records contain personal information, the confidentiality of the information is enhanced.
- It enhances the efficiency of the organization. This is because the organization can use automated systems when carrying out asset disposal. This saves the organization both time and resources.
- The disposal committee can use the documents easily and ask the top management to clarify any issues or concerns that they may have.

### **4.2 Ratified (Simple Representation Endorsement) as Per the Legal Requirements**

#### **Ratification of disposal document**

**Ratification** is the process of making a contract or agreement valid by signing officially or giving a formal consent. The disposal documents should be ratified sufficiently. This will provide evidence of the decision made. Reasons for reaching ratification decision include:

- To have complete description of the records reviewed.
- When the ratification was made.
- The ground on which the decision was made.

#### **Effects of ratification**

It will put the principle and the third party into the positions that they would have been if the agents act had been authorized.

#### **Conditions to be met for ratification of documents to occur**

- The agent must support the act on behalf of the principal.
- The principal must be in existence at the time of contract agreement.
- The principal must have the capacity to enter into the contract.

#### **Advantages of ratification of disposal documents**

- It is an approval of an act by the principle that lacked the authority to bind the principle legally.
- It defines the international act in which a state indicates its consent to be bound to a contract if the parties intended to show their consent by such an act.
- It makes an agreement valid and this increases the confidence of the parties involved.
- Ratification of disposal document is always accompanied by maintaining instruments of confirmation as provided for in contract. This enforces the convention at the early stage of agreement.

### **4.3 File and Maintain Disposal Documents as Per Workplace Policy and Legal Requirements**

#### **Filing and maintenance of disposal documents**

Filing and maintenance of disposal documents ensures that the organization retains records for as long as they are needed and when they are no longer needed, they are destroyed. The objective of proper file management is to be able to find disposal records quickly and economically.

#### **Steps of filing and maintaining disposal documents**

- Assign the responsibility of filling and maintaining disposal documents to the employees.
- Obtain support of top management for reinforcement.
- Collect information on inventory records.
- Analyze the records in terms of expiry, value, size and importance.
- Develop an appropriate filling system.
- Implement the systems.
- Train users on the system that you have developed.
- Monitor implantation, follow up and revise the system.

#### **Advantage of filing and maintaining disposal of documents**

- The business data will remain confidential.
- It makes recycling of data to be easy.
- It is quick and easy way to dispose papers and documents which are no longer needed.
- It saves storage space in the warehouse or store.
- It enhances customers trust to make them confident that their data is being treated securely and with utmost respect.
- To keep employees happy since they will get sense of achievement as far as filling and maintenance of disposal of documents is concerned.
- Protect documents from possible theft that has become common crime with criminals searching documents from rubbish bins.

## Conclusion

In conclusion, this learning outcome trained the learner on skills, knowledge and behavior to document, ratify file and maintain disposal orders and documents as per workplace policy and legal requirements.



### Further Reading

File management and planning ([finance.uw.edu/rec\\_mgt/files-mgt](http://finance.uw.edu/rec_mgt/files-mgt))

Managing the creation, use and disposal of records (unit 3.4 page 33)

### 7.3.5.3 Self-Assessment



#### Written Assessment

1. The decision of disposing documents is verified to avoid ending up disposing important documents.
  - a) True
  - b) False
2. Effective detracting of unwanted documents is the responsibility of asset disposal department.
  - a) True
  - b) False
3. Will efficient filling and maintenance of disposal documents save the storage space?
  - a) Yes
  - b) No
4. Ratification of disposal documents is not binding legally.
  - a) True
  - b) False
5. Documentation of disposal orders helps one to find information quickly and easier.
  - a) False
  - b) True
6. What is ratification of disposal documents?
7. State two procedures of documenting disposal orders.
8. What is the version of carrying out documentation of disposal orders?
9. Differentiate between ratification and filling of disposal orders.
10. State 3 advantages of filling and maintaining of disposal documents and orders.

#### Oral Assessment

1. What are the criteria used to dispose unwanted documents?
2. What are the conditions to be met for ratification of documents to occur?

### **Practical Assessment**

1. Assume that you are supply chain expert. an organization had difficulties of records filling and maintenance what recommendations would you have provided if they engaged you?
2. A company warehouse is full of unwanted documents such that the company does not have space to store new items. As a supply expert, how would you advice the company?
3. The procurement department of a company flouted the company policy regarding to the documentation of disposal orders. As a result the management is in longer heads with the department head. As an expert of supply chain how would you resolve this dispute?

### **7.3.5.4 Tools, Equipment, Supplies and Materials**

- Computers.
- Stationery.
- Classroom and classroom resources.
- The constitution of Kenya 2010.
- Public Procurement and Asset Disposal Act 2015 and its regulations.
- Public Officers Ethics Act.
- Anti-Corruption and Economic Crimes Act 2003.
- Public Finance Management Act 2012.
- Suppliers Manual.
- Sample Procurement Documents.

### **7.3.5.5 References**

- Christopher, M. (2010). Logistics and Supply Chain Management| Martin Christopher. *Financial Times/Prentice Hall*.
- Mangan, J., & Lalwani, C. L. (2016). *Global logistics and supply chain management*. John Wiley & Sons.
- Slack, N. (1983). Flexibility as a manufacturing objective. *International Journal of Operations & Production Management*, 3(3), 4-13.