

The Assessment of Inventory Management Practice: The Case of Awash Wine Share Company

***Kebede Defar Gobeze**

Abstract

The study was intended to investigate the problem of the inventory management practices and controlling system of Awash Wine Share Company. The concept and the definition of inventory management and control system were discussed and the factors that affect inventory management were also listed out. The data for the study were collected by distributing questionnaires to Manager and non-manager of AWSC employees and the rest information was collected through interviewing some top management of the company. The systematic random sampling technique was applied. The respondents were selected by their identification card given from the company until the required sample sizes were obtained. After we got the sample size the participants were asked to fill the questionnaires. All of them were filled properly and returned and the data were analyzed by using SPSS 20 version software for descriptive analysis. The result presented was in tables, simple bar and pie graphs. They were , and interpreted by frequency and percentages. From summary finding, the company has no excessive inventory and optimal level of stock, the balance at which head control notify preparing for purchase at minimum level which may be out of stock and it doesn't provide flexible production schedule. They use manual or computer system for identifying the ware house location, but the store management system is poor regarding health and safety. Safety indication sign are not placed at position in the store and material are not stored the requirement condition like temperature room control and humidity control were not placed in the store at all. Due to this problem, some material were deteriorated before the expiry date.

Keywords: AWCS, control system, descriptive statistics, Inventory management.

1. Introduction

Background of the Study

Inventory consists of products either purchased from an outside vendor or manufactured on a company's own premises for the comforting purpose of

*Email: kebeded8@gmail.com¹ Department of Management, Faculty of Business St. Mary's University, Addis Ababa, Ethiopia

reserving the finished good to customer. The inventory values on the financials statement include the cost associated with manufacturing and/or purchasing the products. The cost includes direct materials and parts as well as the related overhead associated with the manufacturing process. Inventory control is defined as “a science-based art of controlling the amount of inventory business needs to economically meet the demands placed upon that business. It is also the application of best practices and common sense procedures used to control the inventory management process” (Gopalakrishnan, 2008).

Inventory represents three elements depending on the nature of the firm's nature. These are raw Material, semi processed and finished goods. Therefore, one's firm finished goods can be raw material for the other inventory management and production\ maintenance\ is interdependent in achieving production targets because production schedules cannot meet and be achieved without timely supply of inventory, (P.Gopalakrishnan.2008).

The function of inventory control is to balance the set-up costs of procurement with inventory carrying costs in order to see that cost is kept minimum, while, at the same time, holding of optimum inventory is possible, (Datta , 2003).

According to the AWSC policy procedure inventory is defined as the sum of the value of raw materials, fuels and lubricants, spare parts, semi processed materials and finished goods stocked at given plant on time. The internal control management system of AWSC exists in Main Store as such purchasing, Receiving, Storing and Issuing. The Company has one recoding & inspection unit in the central store . The central store is divided in to 4 Ware houses. Ware house 1 used to store finished goods, ware house 2 is used for storing raw material ware house 3 is used for storing scrap material and spar part materials; ware house 4, is used for storing stationary material and different closes and safety and marketing tools (AWSC, 2017).

Statement of the Problem

Inventory management and Control must address to meet the state of the market place and support the company's strategic plan. The many changes in the market demand, new opportunities due to worldwide marketing, global sourcing of materials, and new manufacturing technologies, that many companies need to change, important and update their inventory control

process. Therefore, proper usage of inventories is vital in any organization due to its great distribution for a better success of the organization. For this reason, organizations are required to focus and implement internal control procedures, rules and regulations (Whittington and pony, 1995).

Inventory management system or process provides information to effectively utilize people and equipment, coordinate internal activates, and communicates with customer. The Activities of internal control do not make decisions or manage operations; they provide the information that makes more accurate and timely decisions to manage their operations. An internal control System should design and operate to provide reasonable assurance. That is, an entity's cost of internal Inventory management and Control system should not exceed the benefits that are expected to be derived (Toomey, J. W., 2000).

Even though Awash Wine Share Company has inventory management and control system policy it appears its implementation has not been properly carried out this leads to always complain miss match balance between consumption and issued material from store the justification for this problem personal observation weekly and monthly report and key information from management complain during monthly and weekly meeting. Through conducting a preliminary investigation /assessment/ on the inventory management and control system indicate that there existed lack of adequate skill and capacity/ability/ of the store manager and supervisor on the inventory management and control system as well as they is also lack of adequate knowledge of the inventory management and control system. This problem has therefore provoked the student to study on the inventory management practice that and control system in Awash Wine Share Company. Therefore, the intention of this research is to investigate of IMCS (inventory management and control system) practices in Awash Wine Share Company

Research Questions

This study tries to answer the following specific question based on the problem of the study

1. What are the problems observed in inventory handling of Awash Wine Share Company?

2. What are the Strengths and weakness observed in the application of inventory management practice in Awash Wine Share Company?
3. When does inventory take place and how long it takes?

Objective of the Study

General Objective

The general objective of this study is to assess inventory management practice in Awash Wine Share Company.

Specific Objectives

Based on the main objective of this study and the problem statement, the study has the following specific objectives:

1. To discuss the aim of inventory management and control and indicate the challenges of inventory management practices and control In Awash Wine share company
2. To identify the major strengths and weakness of inventory management practices and control system of the Awash Wine share company.
3. To indicate major solution on the long duration taken on inventory activities and inform appropriate time.

Significance of the Study

The study provides the possible suggestions for inventory management practices and control system Awash Wine Share Company .Moreover, it help the researcher to acquire knowledge in the area and understanding practical experience. Furthermore, the study will help as a source of document and stepping stone for those researchers who want to make further study in the area.

Scope of the Study

The scope of this case study is limited to inventory management practice and controlling system in Awash Wine Share Company. Thus, it is intended to assess the existing of inventory management practice and controlling system. The population coverage will only be managers and employees Awash Wine Share Company. In addition the study relied on the responses of the questionnaires and interviews that are filled out and answered by manager

and non-manager of employees in procurement, production, finance, and quality, technical and marketing and sales.

2. Research Design and Methodology

Research Design

The researcher was used descriptive research design. This research design allowed the researcher to describe the population characteristics using frequency and percentage .all the methods in descriptive design are used to describe how the existing inventory management and control system functions.

Population, Sample Size and Sampling Techniques

The population for this research are managers and non -manager employees of Awash Wine Share Company. Since there are finite populations which counted to be 254 workers in AWSC and if it is noted that the pollution is finite sample size can be determined by the formula:

$$n = \frac{N}{1 + Ne^2}$$

Given that 5% non-response rate has been considered.

Where: $n =$ is the sample size,

$N =$ total population size and $e =$ the level of of precision

Since we have no standard deviation and population mean, by taking margin of error 10% in order to get the representative sample size $n = \frac{254}{1+254(0.1)^2} =$

72 and 5% of non-response rate= 4. The total sample size taken for this study was 76. As far as sampling technique is concerned, a systematic random sampling applied in order to select the respondents because the researcher have list of the population (sampling frame) from Awash Wine Share Company. The respondents were selected by their identification card given from the company until the required sample sizes were obtained. After we got the sample size the participants were asked to fill the questionnaires.

Types of Data Used

The study used both primary and secondary data. The primary data collected from the sample respondents and secondary data gathered through the company's document and report and review related document.

Data Collection Method

The primary data for this study was collected by distributing questionnaires and interviews. The interview has also been conducted with top level manager. It is important since it helps check the validity of the data that collected through questionnaires. In the Questionnaire mainly structured and closed-ended questions were used.

Methods of Data Analysis

After collecting of both primary and secondary data, the researcher classified, processed analyzed and interpreted data thoroughly. Before going through analysis, the student researcher edited, coded, classified after has been encoded into SPSS 20 version software for descriptive analysis. The result has been presented through tables, diagrams, and charts.

Organization of the Study

The study is organized in four chapters. Chapter one provide brief background information to study, overview of the company under case study, discusses the research problem, objective of the study scope and limitation, and significance of the study, data collection and analysis method. Chapter two reviews detail literatures which are related to study. Chapter three provides data presentation, analysis and interpretation in the last Chapter summary of findings, conclusions and recommendations are drawn based on the result of the study.

3. Data Presentation, Analysis and Interpretation

In this part we present characteristics of the respondents, analysis and interpretation of data collected from management and non-management employees of awash wine share company.

General Characteristics of Respondents

Seventy six (76) questionnaires were distributed and have completely filled and returned back. The questionnaire that incorporates Twenty two closed type questions for manager and non-management of AWSC employees and nine interview questions for members of the top management are administered safely.

Gender of Respondents

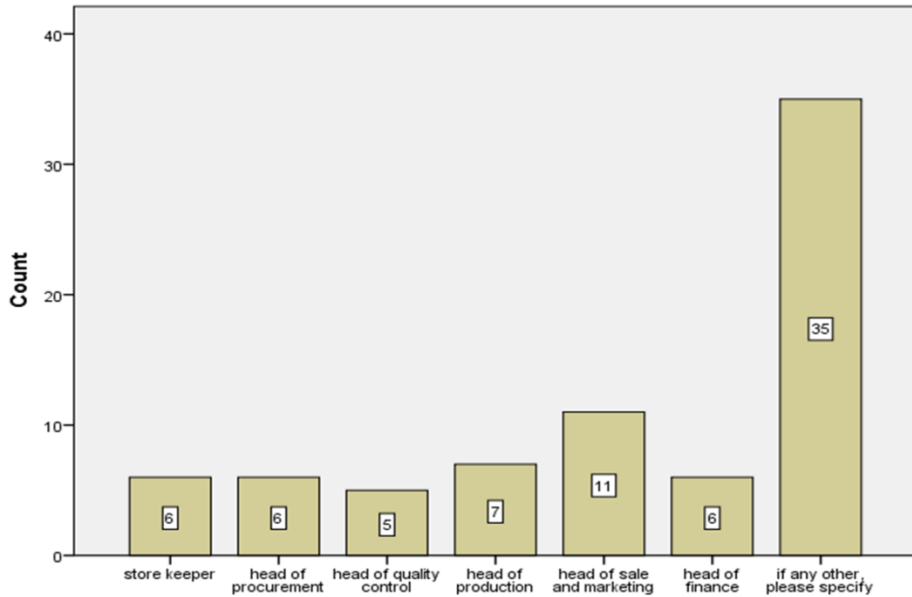
Sex of respondent	Frequency	Percent
Male	56	73.7
Female	20	26.3
Total	76	100.0

As seen from above table the sex respondent out of 76 sample population 56(73.7%) males and 20(26.3%).from above table the majority participated in the study are male

Age Group of Respondent

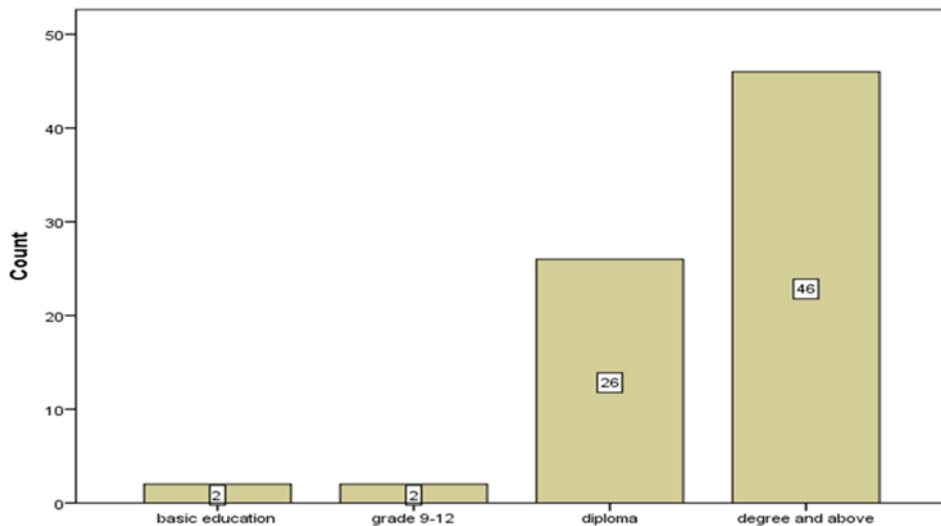
Age group [Years]	Frequency	Percent
Under 25	15	19.7
26-35	37	48.7
36-45	13	17.1
>46	11	14.5
Total	76	100.0

As seen from above table age respondent 15(19.7%) under25 years of age, 37(48.7%) within range of 26-35 years of age, 13(17.1%) within range of 36-45years of age and 11(14.5%) are above 46years of age. This indicates those majority respondents are adult and young worker.



Source: Primary data (2018)

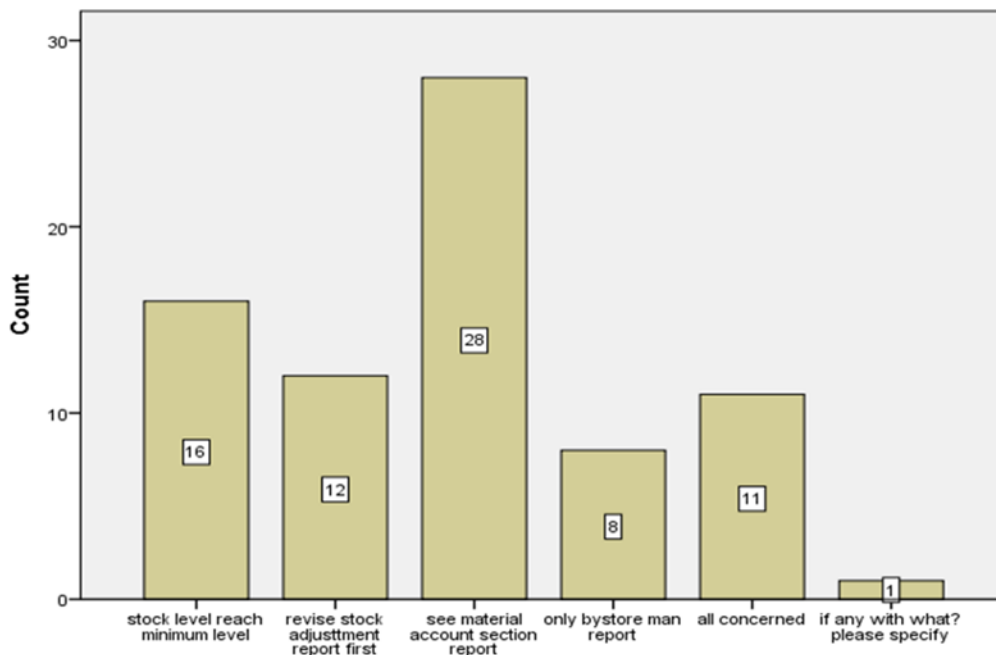
From above Figure the majority respondent those participated in the study were the job title are non- management or which specify there job title individual. Least respondent is from head of quality control categories.



Source: Primary data (2018)

Qualification level of respondent

As seen from above Figure 3.2 46(60.5%) are degree and above qualification are participated in study .the respondent has most probable good knowledge about the study and response in good appropriate way.



Source: Primary data (2018)

Base for Preparing Purchase request

As seen from above figure the base for preparing purchase request as most respondent indicates by looking material account section report and to some extent the base for preparing purchasing request is stock level reach minimum which this indicate the company may out of stock and there is no safety stock ,this leads to production gap ,it cannot providing adequate protection against uncertainties of supplies and consumption of materials.

Inventory method used in AWSC

	Moving Average	FIFO method	LIFO method
Median	2.00	2.00	2.00
Mode	2	2	2

	Degree used	Number	Percent
To what extent does AWSC use the following inventory materials?	To great extent	52	23.4%
	To some extent	109	49.1%
	Undecided	57	25.7%
	never at all	4	1.8%
Total		222	100.0%

Source: Primary data (2018)

From above table we can justify that the company used highly to some extent FIFO method when we compare with the three approaches of inventory.

<i>Have you ever faced excess inventory?</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	21	27.6	27.6	27.6
No	49	64.5	64.5	92.1
Other	6	7.9	7.9	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

From above table it was noted that the company doesn't face excessive inventory, this indicate that the company avoid excessive inventories which increase chance of loss of liquidity and the physical deterioration of inventory in storage

Level of the balance material does control head notify to preparing the purchase request	Frequency	Percent	Valid Percent	Cumulative Percent
Minimum level	30	39.5	39.5	39.5
Record level	25	32.9	32.9	72.4
Moderate level	15	19.7	19.7	92.1
If the material become null	5	6.6	6.6	98.7
Balance	1	1.3	1.3	100.0
Total	76	100.0	100.0	

From above table most respondent replies the balance material at which control head notify prepare for purchase request is minimum level, this indicate the company may out of stock and there is no safety stock ,this leads to production gap ,it cannot providing adequate protection against uncertainties of supplies and consumption of materials.

<i>Is there optimal stock level?</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	30	39.5	39.5	39.5
No	44	57.9	57.9	97.4
Do not know	1	1.3	1.3	98.7
Any other	1	1.3	1.3	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

From above table the majority respondent indicates there is no optimal stock level so this indicates it doesn't providing flexibility to allow changes in

production lines in production lines due to changes in demands or any other reason.

<i>What kind of purchase do you use?</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Foreign	5	6.6	6.6	6.6
Local	10	13.2	13.2	19.7
Both	61	80.3	80.3	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

From above table the company used both local and foreign purchase as most respondent replies, even though the local purchase coverage is higher as compared to foreign.

<i>Is there proper material control system in AWSC</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	9	11.8	11.8	11.8
Agree	24	31.6	31.6	43.4
Agree to some extent	29	38.2	38.2	81.6
Disagree	7	9.2	9.2	90.8
Strongly disagree	7	9.2	9.2	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

From above table the majority respondent indicate agree to some extent the material control system of the company, this indicate the there is a problem in material control system in company due to lack of adequate skill and capacity/ability/ of the store manager and supervisor on the inventory management and control system.

<i>Does the organization have different store for different material?</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	52	68.4	68.4	68.4
No	13	17.1	17.1	85.5
Do not know	7	9.2	9.2	94.7
Any other	4	5.3	5.3	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

As indicated in above table the company has different store for different material, even though there is a problem of material control system as stated /discussed in properly material control system.

Number of available stores in AWSC

<i>Number of available stores in AWSC</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Two stores	6	7.9	7.9	7.9
Three stores	16	21.1	21.1	28.9
Four stores	42	55.3	55.3	84.2
Any other	12	15.8	15.8	100.0
Total	76	100.0	100.0	

Source: Primary date (2018)

From above table the company has four stores for storing different material .even though the company has different store for different material because of poor inventory management and controlling system always the company face with problem of inventory raw material and out of stock before the end of the year.

<i>Are there proper procedures to ensure that items removed by authorizations?</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	49	64.5	64.5	64.5
No	23	30.3	30.3	94.7
Do not know	4	5.3	5.3	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

As indicated in above table it was perceived that most respondents replies items or goods removed from store by proper producer to ensure item removed and some respondent say no because there is weak update of inventory control system in the company.

Stocks are subjected to physical verification /count on

<i>Stocks are subjected to physical verification /count on</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Continuous basis	24	31.6	31.6	31.6
Periodic count during the month	40	52.6	52.6	84.2
At the end of fiscal year only	8	10.5	10.5	94.7
Any other	3	3.9	3.9	98.7
Quarterly count	1	1.3	1.3	100
Total	76	100	100	

From above table the majority respondent replied the stock of company are subject to physical verification /inventory count periodical count during the monthly and the rest replies the stock verification done at end of fiscal year only which means that if some of the items in the inventory are missing or stolen, there is no way for the company identify the lost items until the end of the fiscal year.

Are there competent personnel in the inventory management?	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	31	40.8	40.8	40.8
No	41	53.9	53.9	94.7
Other	4	5.3	5.3	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

From above table most respondent replies that there is no competent personnel person in the inventory management so this lead to weak inventory management and controlling system.

Is there training program for employees about inventory management and control system?

<i>Is there training program for employees about inventory management and control system</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	26	34.2	34.2	34.2
No	48	63.2	63.2	97.4
Do not know	2	2.6	2.6	100.0
Total	76	100.0	100.0	

Source: Primary data (2018)

The above table indicated the majority respondent replies there is no training program for employees about inventory management this indicate that there is gap on practice of inventory management and control system in company due to lack of experience share and training so the employees has lack of implementation properly inventory management system which can result to miss the advantage of properly inventory management system

Checklist for inventory management practice and control system of awash wine share company

The information gathered through personal observation and interview with top management of the company like procurement head, production head store supervisor finance head and marketing and sale head ,the company has four store (finished goods store ,raw material store, scrap and spare part material store and stationary, safety material and marketing tool store)

All material are codified according to their nature and used but the store has limit space and the codification is not handled properly it is difficult to access within short period of time to get material, also the company uses hill mark software system which categories the material by code digits. There is problem with update of system by store keeper and delay the material requisition date and issue date is not match this problem seen at end of every months and all department complain the raw material consumption not meet what issued by system ,the bin card is used some time for nonstick material and the store keeper prepare it.

The organization has return raw material by return voucher on the hill mark software, return Material is not properly handled and returns to store on time and mislead of return were seen Every 3 month(four times) the company planned to physical verification inventory and finance department responsible for record for the receipt of materials in a material ledger. the organization use effective manual or computer system for identifying the ware house location and the but the store management system is poor regarding health and safety, safety indication sign are not placed at position in the store and material are not stored the requirement condition like temperature room control and humidity control are not place in the store at all, due to this problem some material are deteriorated before the expired.

4. Summary, Conclusions and Recommendations

Summary of the Finding

The majority of respondent participated in the study were male. The major respondent in study lies the age between 26-35 years. The qualification of respondent who participated to response the questionnaire are degree and above qualification and the most respondent are working experience of 1-5years.

The company didn't face excessive inventory and the balance of material at which head control notify prepare for purchase at minimum level which indicated that the company may out of stock. There is no optimal stock level in the company which doesn't provided flexibility to allow changes in production. The company uses both local and foreign purchase even though the local purchase coverage was higher.

Majority respondent agree to some extent the material control system of the company which refers to there is lack of skill and capacity to implement proper inventory management and controlling system in the company. The company has different store for different material even though it doesn't properly managed. There was no competent personnel in the inventory management in the company since there was no training programmer for employee about inventory management and control system.

Conclusions

The researcher finally came with the following conclusion:

The physical verification/inventory periodical count during the every three month, which means that if some of the items in the inventory are missing or stolen, there is easy way for the company to identify the lost items and the used of hill mark software system encourage the company for batter record of inventory for further information, is seen as the strength of company also the use of higher coverage local purchase help company to purchase material with low cost, the absence of excessive material in inventory, high responsibility taken by head of procurement and the least accountable is head of finance for material not available store , this indicate that there is no overlapping of responsibility or authority , but improper implementation of inventory management practice and control system and the lack of update of return raw material by return voucher on the hill mark software on time and mislead of return, the absence of training about inventory and control system for employees were seen was the weak of company,

Generally there is some mismatch regarding the material requirement planning and order point of quantity, this indicated that the company lose the designer advantage that obtain from properly inventory management system

Recommendations

Based on the finding in the study the following recommendations have been forwarded to alleviate the problem and keep up with the strength.

- The balance of material at which head control notify prepare for purchase at minimum level which indicate the company may out of stock which doesn't providing adequate protection against uncertainties of supplies and consumption of materials. Therefore, The Company should be having reorder point with safety stock balance.
- The company should avoid weak implementation of inventory management and control system by providing proper training for the employees about inventory management and controlling system and also recruited competent personnel for position.
- The company has different store for different material but the store has limit space and the codification which is not handled properly. This made difficulty to access within a short period of time to get material. So the company should take into account for better handling the store as per requirement suitable storage facilities and definite description material.
- The aim of inventory management is to avoid excessive and inadequate levels of inventories and to maintain sufficient inventory for the smooth production and sales operations. Therefore, the company should be made to place an order at the right time with the right source to acquire the right quantity at the right place and quality.

5. References

- A.K Datta. (1987). Materials Management and Inventory control, Principles and practice, Delhi. 5thEdition, Jaico publishing house, PVT Ltd.
- A.K Datta. (2003). Materials Management, 2ndEdition. Delhi.
- Awash Wine Share Company, (2017), Procurement Manual
- Donald W.Dobler and David N.Burt. (1996) Purchasing & Supplies Management .Text and cases, 6th Edition, Tata McGraw-Hill Publishing company Ltd, Newdelihii [https:// www. quora. com/What-is-Yamane-sample-calculation](https://www.quora.com/What-is-Yamane-sample-calculation)
- I.M. Pandey (2000), Financial Management, 8thEdition, Vikas publishing House PVT, Ltd
- Mathew, P.D. (1968) Hand book of Inventory Management, Culcata

Nair, N.K. (1985). Materials Management, 3rd Edition, Bombay .Asia publishing house,
P.Gopalakrishnan. (2008). Hand Book of Materials Management Delhi, ,
Prentice –Hall of India, PVT Ltd
S.C. Sharma, (2004).Production Management .Delhi: Prentice - Hall, Inc.
Toomey, J. W. (2000). Inventory Management: Principles, Concepts and
Techniques. Norwell: Kluwer Academic Publishers.
Whittington and pony. (1995). Principles of Auditing 2nd edition, London.
William J. Stevenson, (2000) Production Operation Management USA