A STUDY ON INVENTORY MANAGEMENT OF SRI AUROBINDO PACKAGERS (P) LIMITED, CHENNAI

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ABSTRACT

The present study has attempted to analyze the need and importance of Inventory management and the present state of Sri Aurobindo packagers. The study is fully based on secondary data from financial records and profile of the company. The data collected from the reports were analyzed using financial tool like ratio analysis and ABC Analysis. Based on the findings, recommendations have been made for improving the performance of the organization.

Key words: *Inventory management, Ratio analysis, ABC analysis*

INTRODUCTION

Inventory management is primarily about specifying the size and placement of stocked goods. Inventory management is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods.

In any organization the labor cost and overheads remaining fairly fixed, the scope for reducing the cost lies only in controlling be working capital requirements, 'material costs' and in eliminating capital requirements is used for a procurement of material and holding inventory for production. Therefore any reduction in inventory has a direct impact on the profit of the organization. We can identify as those good which are procured stored and used for the day to day functioning of the organization.

The classical definitions of inventory are that it is an idle resource of any kind having an economic value. Since most of the companies fund is invested on inventories, it is necessary to control the inventory. Inventory control in planning and devising procedures to maintain an optional level if the idle resources.

NEED FOR THE STUDY

Inventory is actually 'money', but not kept as money but some items or parts or accessories that are required to make a product, spare parts, tools, etc., for any manufacturing company it is very important. This constitutes the second largest item after fixed assets in the financial statements. This study is undertaken to analyze their present inventory control system and see what are all the difficulties that they facing and how to overcome it. This also involves the study on requirement, consumption, and amount of wastages and to give suggestion, the wastage and excess consumption can be minimized through proper methods and techniques. Therefore the present inventory system followed and gives recommendations for better inventory management.
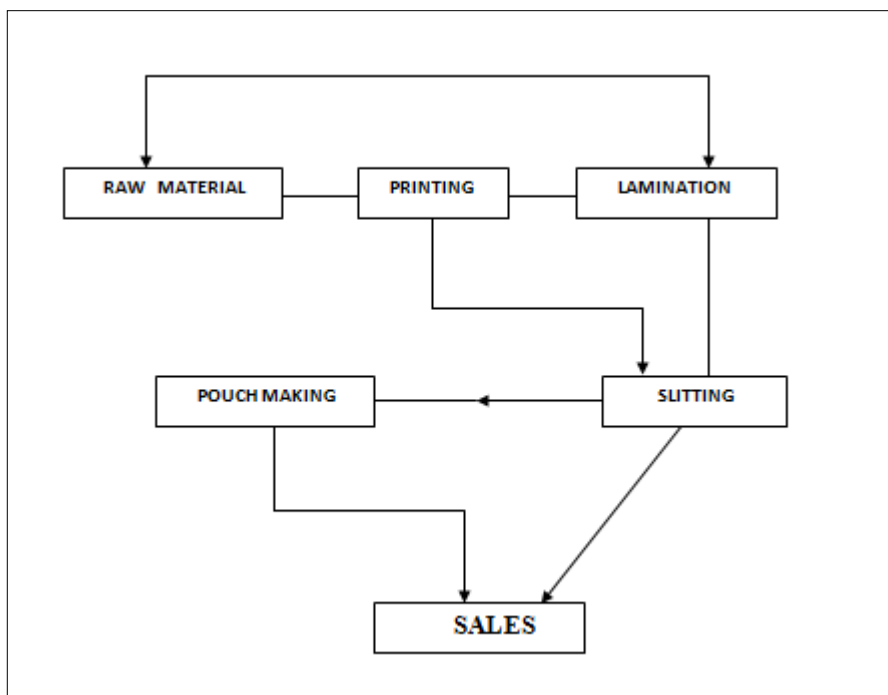
SCOPE OF THE STUDY

- ❖ It develops policies for both the continuous review and the periodic review of inventory control system.
- ❖ It distinguishes the different types of inventory and knows how to manage their quantities.
- ❖ Saving can be increased which is used for satisfaction of working capital needs.

SRI AUROBINDO PACKAGERS (P) LTD was incorporated and started commercial business on February, 2000. They are one of the leading manufacturers of flexible packing material in Chennai. They supply packing material to pack various products like Atta, rice, vermicelli, spices, detergents, shampoo, biscuits, liquor, fish & prawn feed and other snack food. The business house is run by a group of youngsters who thrive on hard work with a vision to become a 100crore company by the end of the year 2010 through continues improvement in process and sales. Since their incorporation we have grown multifold through sustained patronage from their customers earned through our best quality and service. They are equipped with 2 printing machines of 4 colours and 8 colours and adequate Lamination, slitting and pouch making facilities.

PRODUCTION FLOW CHART & PROFILE OF MACHINES

The manufacturing of flexible packaging material involves the following material and process.

MANUFACTURING TOOLS AND RAW MATERIALS

OBJECTIVES OF THE STUDY

❖ To understand the stock maintenance of the company through inventory management system.

❖ To analyze the effect of inventory management in the profitability of the organization.

❖ To provide interpretation on business performance with view of ensuring optimum use of inventory management.

❖ To offer suggestions.

LIMITATIONS OF THE STUDY

❖ The study is based on the secondary data collected from the Annual report on the company. Hence the reliability of the data may not be accurate.

❖ The study is limited to Sri Aurobindo packagers pvt ltd and others concerns are not considered.

❖ The validity of analysis and suggestions depends on the financial statements and reports, provided by the company.

METHODOLOGY OF THE STUDY

Research consists of various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them. The research design adopted for the purpose of analyzing Inventory Management is analytical in nature. The data related to the study of inventory management were gathered from secondary source. It has collected from the annual reports of Sri Aurobindo packagers pvt ltd. The data also collected by way of interacting with various departments relating to the inventories. The data so collected has been used and complied with due care as per the requirements of the study. The period of the study on inventory management covers a period of five years from 2013-2018. The tools used for analyzing the study are Ratio analysis and ABC analysis.

REVIEW OF LITERATURE

Mr.T.Venkatasubramaniam (1994) of had done a project in inventory control maintenance spares and bearing for Indian cements limited. He states that due to improvement in technology, there is more number of obsolete spares, which should be disposed.

Mr.P.Ravichandran (1999) had done a project on inventory control system in Vigshan tools, Coimbatore. He concluded that the analysis done, gives some useful implication that the management can look upon and take successful decisions.

Mr.P.Senthilnathan (2000) had done a project on spare parts inventory management in Bharat Heavy Electricals Limited, Trichy. He states that the company has a good investment policy for raw materials for which it adapts various principles of forecasting, procurement and stocking. He recommended that for all desirable items to procure the require demand of that year at the beginning itself.

Ms.S.Jayanthi (2000) had done a project on inventory and inventory control in M/S. Auto Print Machinery MFRS Private Limited. She found that at the end of the years, maintaining these data's reduce the value at a greater extends and the money is used for any other working capital.

Mr.Ashok Nair (2003) had done a project in inventory management prevailing at Hindustan Organic Chemicals Limited, Cochin. He states that on receiving the order of items, the stores department must ensure that the items are utilized to their fullest capacity.

ANALYSIS AND INTERPRETATION

TABLE NO 1 - INVENTORY TURNOVER RATIO

YEAR	NET SALES (Rs. in lakhs)	INVENTORY (Rs.in lakhs)	RATIO
2013-2014	441.29	49.78	8.86
2014-2015	633.65	80.83	7.83
2015-2016	644.53	72.11	8.93
2016-2017	762.25	89.11	8.55
2017-2018	893.41	103.34	8.64

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

The ratio is 8.86 in the year 2013-2014. In the year 2014-2015 due to huge investment in inventories leads to decrease in inventory turnover ratio. The inventory turnover ratio is in satisfactory level.

TABLE NO 2 - INVENTORY TO CURRENT ASSET

YEAR	INVENTORY (Rs.in lakhs)	CURRENT ASSET (Rs.in lakhs)	RATIO
2013-2014	49.78	158.25	31.46
2014-2015	80.83	228.68	35.34
2015-2016	72.11	258.76	27.86
2016-2017	89.11	321.41	27.72
2017-2018	103.34	409.49	25.24

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

Inventory to current assets has a decreasing trend. It rises from 2014-2015 and then starts decreasing from the year 2015-2016. The raise of inventory will automatically raises its percentage in current assets and the other variables such as cash: debtors will occupy only the lesser portion.

TABLE NO 3 - INVENTORY TO TOTAL ASSETS

YEAR	INVENTORY (Rs. In lakhs)	TOTAL ASSETS (Rs. In lakhs)	RATIO
2013-2014	49.78	233.20	21.34
2014-2015	80.83	319.93	25.26
2015-2016	72.11	311.74	23.13
2016-2017	89.11	344.87	25.84
2017-2018	103.34	405.20	25.50

Source : Annual reports of sri Aurobindo packagers pvt ltd.

It increase in 2013-2014 and decreases in the year 2015-2016.Even though the total assets have no direct impact on inventories it should be controlled. The portion that inventory occupies in total assets comes to an average of 23.61% so the level of inventory position of Sri Aurobindo packagers pvt limited concerned with total assets is quite satisfactory.

TABLE NO 4 - WORK IN PROGRESS TO INVENTORY

YEAR	WORK IN PROGRESS (Rs. In lakhs)	INVENTORY (Rs. In lakhs)	RATIO
2013-2014	4.01	49.78	8.03
2014-2015	7.93	80.83	9.81
2015-2016	15.5	72.11	21.49
2016-2017	19.24	89.11	21.59
2017-2018	17.12	103.34	16.56

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

Work in progress to inventory was high in the year 2016-2017 is 21.59%. There was a fluctuation in Percentage of work in progress in inventory. Percentage of work in progress in inventory was very low in the year 2013-2014 is 8.03. In general Percentage of work in progress in inventory may said to be satisfactory.

TABLE NO 5 - FINISHED GOODS TO INVENTORY

YEAR	FINISHED GOODS	INVENTORY	RATIO
2013-2014	4.73	49.78	9.49
2014-2015	9.94	80.83	12.29
2015-2016	15.29	72.11	21.20
2016-2017	15.57	89.11	17.47
2017-2018	21.94	103.34	21.23

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

Percentage of finished goods in inventory was high in the year 2017-2018 is 21.23%. There was a fluctuation in Percentage of finished goods in inventory. Percentage of finished goods in inventory was vary low in the year 2013-2014 is 9.49. In general Percentage of finished goods in inventory may said to be satisfactory.

TABLE NO 6 - THE CLASSIFICATION OF THE ITEMS YEAR 2013-2014

ITEMS	VALUE (Rs in Lakhs)	CUMULATIVE USAGE (Rs in Lakhs)	CUMULATIVE PERCENTAE	CATEGORY
Polyester (PET)	33.02	33.02	23.12	A
Metallic Polyester (METPET)	5.62	38.64	27.06	A
LDPE (POLY)	11.93	50.57	35.42	A
BOPP	15.18	65.76	46.04	A
Paper	5.13	70.88	49.64	A
Adhesive	10.14	81.02	56.73	A
Ink	2.79	83.81	58.69	A
Plasticizers	0.74	84.55	59.20	A
Stiffner	1.20	85.75	60.04	A
Bpp board	10.15	95.90	67.15	A

P.E coated printing foil	14.84	110.74	77.54	B
Flexible films	4.19	114.93	80.48	B
Solvence	0.75	115.69	81.01	B
Others	27.1	142.80	100	C

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TABLE NO 7 - ABC ANALYSIS ON THE BASIS OF VALUE

Category	No of Items	Percentage
A	10	71.43
B	3	21.43
C	1	7.14
Total	14	100

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

From the table in indicates that a group items are polyester, metallic polyester, LDPE,BOPP, paper, adhesive, ink, plasticizers, stiffner, Bpp board they have the better Inventory management which is favorable to the organization. B group's items are P.E coated printing foil, flexible films and Solvence, which would demand lesser control. C group items are other components get still less control.

TABLE NO 8 - THE CLASSIFICATION OF THE ITEMS (YEAR 2014-2015)

ITEMS	VALUE (Rs in Lakhs)	CUMULATIVE USAGE (Rs in Lakhs)	CUMULATIVE PERCENTAGE	CATEGORY
Polyester (PET)	65.76	65.76	26.2	A
Metallic Polyester (METPET)	5.37	71.13	28.3	A

LDPE (POLY)	10.95	82.08	32.7	A
BOPP	26.34	108.39	43.2	A
Paper	25.32	133.72	53.3	A
Adhesive	5.95	139.67	55.7	A
Ink	13.35	153.02	61.05	A
Plasticizers	3.74	156.76	62.5	A
Stiffner	0.89	157.64	62.8	A
Bpp board	2.00	159.64	63.6	A
P.E coated printing foil	7.87	167.51	66.8	A
Flexible films	19.02	186.52	74.4	B
Solvence	12.39	198.90	79.3	B
Resins	2.48	201.38	80.3	B
Aluminum foil	10.37	211.74	84.4	B
Others	38.90	250.64	100	C

TABLE NO 9 - ABC ANALYSIS ON THE BASIS OF VALUE

Category	No of Items	Percentage
A	11	68.75
B	4	25
C	1	6.25
Total	16	100

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

From the table in indicates that a group items are polyester, metallic polyester, LDPE,BOPP, paper, adhesive, ink, plasticizers, stiffner, Bpp board and P.E coated printing foil they have the better Inventory management which is favorable to the organization. B group's items are flexible films, Solvence, resins, and aluminium foil which would demand lesser control. C group items are other components get still less control.

TABLE NO 10 - THE CLASSIFICATION OF THE ITEMS YEAR 2015-2016

ITEMS	VALUE (Rs in Lakhs)	CUMULATIVE USAGE (Rs in Lakhs)	CUMULATIVE PERCENTAGE	CATEGORY
Polyester (PET)	66.30	66.30	23.43	A
Metallic Polyester (METPET)	8.28	74.58	25.90	A
LDPE (POLY)	11.70	86.27	30.50	A
BOPP	2.26	88.53	31.29	A
Paper	23.06	111.59	39.44	A
Adhesive	77.05	119.29	42.17	A
Ink	12.35	131.64	46.53	A
Plasticizers	1.89	133.54	47.20	A
Stiffner	1.33	134.87	47.67	A
Bpp board	2.24	137.10	48.46	A
P.E coated printing foil	14.95	152.05	53.73	A
Flexible films	17.99	170.04	60.11	A
Solvence	9.33	179.37	63.40	A
Resins	1.80	180.45	63.79	A
Aluminum foil	12.65	193.11	68.26	A
Razor blade	13.60	206.70	73.07	B
Nylon	21.20	227.90	80.56	B
Others	55.00	282.90	100	C

TABLE NO 11 - ABC ANALYSIS ON THE BASIS OF VALUE

Category	No of Items	Percentage
A	**15**	**83.33**
B	**2**	**11.11**
C	**1**	**5.56**
Total	**18**	**100**

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

From the table in indicates that a group items are polyester, metallic polyester, LDPE,BOPP, paper, adhesive, ink, plasticizers, stiffner, Bpp board, P.E coated printing foil,

flexible films, Solvence, resins, aluminium foil, they have the better Inventory management which is favorable to the organization. B group's items are nylon, razor blade which would demand lesser control. C group items are other components get still less control.

TABLE NO 12 - THE CLASSIFICATION OF THE ITEMS YEAR 2016-2017

ITEMS	VALUE (Rs in Lakhs)	CUMULATIVE USAGE (Rs in Lakhs)	CUMULATIVE PERCENTAGE	CATEGORY
Polyester (PET)	72.54	72.54	22.69	A
Metallic Polyester (METPET)	7.99	80.44	25.16	A
LDPE (POLY)	18.72	99.17	31.02	A
BOPP	7.63	106.79	33.41	A
Paper	60.03	166.82	52.62	A
Adhesive	9.37	176.19	55.12	A
Ink	13.59	189.78	59.37	A
Plasticizers	2.53	192.31	60.16	A
Stiffner	1.74	194.06	60.71	A
Bpp board	11.15	205.21	64.19	A
P.E coated printing foil	13.59	218.76	68.43	A
Flexible films	24.37	243.13	76.06	B
Solvence	10.04	253.17	79.20	B
Resins	2.24	255.39	79.89	B
Aluminum foil	2.47	257.86	80.66	B
Others	61.81	319.67	100	C

TABLE NO 13 - ABC ANALYSIS ON THE BASIS OF VALUE

Category	No of Items	Percentage
A	11	68.75
B	4	25

C	1	6.25
Total	**16**	**100**

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

From the table in indicates that a group items are polyester, metallic polyester, LDPE,BOPP, paper, adhesive, ink, plasticizers, stiffner, Bpp board and P.E coated printing foil they have the better Inventory management which is favorable to the organization. B group's items are flexible films, Solvence, resins, and aluminium foil which would demand lesser control.

TABLE NO 14 - THE CLASSIFICATION OF THE ITEMS YEAR 2017-2018

ITEMS	VALUE (Rs in Lakhs)	CUMULATIVE USAGE (Rs in Lakhs)	CUMULATIVE PERCENTAGE	CATEGORY
Polyester (PET)	93.21	93.21	26.67	A
Metallic Polyester (METPET)	8.08	101.29	27.90	A
LDPE (POLY)	21.38	122.67	33.79	A
BOPP	10.16	132.83	36.59	A
Paper	60.99	193.82	53.39	A
Adhesive	10.59	204.41	56.31	A
Ink	21.31	225.72	62.18	A
Plasticizers	2.27	227.99	62.81	A
Stiffner	2.52	230.51	63.50	A
Bpp board	19.83	250.35	68.97	A
P.E coated printing foil	12.50	262.85	72.42	B
Flexible films	26.09	288.94	79.59	B

Solvence	13.54	302.48	83.33	B
Resins	2.38	304.86	83.98	B
Aluminum foil	2.375	307.23	84.64	B
Others	55.77	363.00	100	C

TABLE NO 15 - ABC ANALYSIS ON THE BASIS OF VALUE

Category	No of Items	Percentage
A	10	62.5
B	5	31.25
C	1	6.25
Total	16	100

Source : Annual reports of Sri Aurobindo packagers pvt ltd.

From the table in indicates that a group items are polyester, metallic polyester, LDPE,BOPP, paper, adhesive, ink, plasticizers, stiffner and Bpp board they have the better Inventory management which is favorable to the organization. B group's items are P.E. coated printing foil flexible films, Solvence, resins, and aluminium foil which would demand lesser control. C group items are other components get still less control.

FINDINGS

❖ The inventory turnover ratio indicates that the company has proper inventory management measures and efficient inventory management.

❖ The inventory to current assets ratio indicates that the inventory management is good.

❖ The inventory audit is done at regular interval addition to the annual audit.

❖ The inventory is decreased and the other current assets value is increased from year by year.

❖ The inventory conversion period shows a fluctuation trend throughout the period of study.

❖ Inventory in total asset is found to be in fluctuation trend and the average inventory occupies in total assets is 23.61%. The level of inventory of Sri Aurobindo packagers pvt ltd concerned with total assets is satisfactory.

❖ ABC analysis is an application of the principles of management by exception to the field if inventory management materials are analyzed according to their value so that costly

materials are given greater attention and care by management. Accordingly items of high value are subject to closer control that the items of low value.

SUGGESTIONS

- ❖ The excess investment in inventory can be minimized if there is a proper inventory management.
- ❖ The inventory should be reduced but it should not be increased unless the demand arises.
- ❖ The inventory conversion period as for Sri Aurobindo packagers pvt ltd concerned as satisfactory level.
- ❖ The company has a closer control of the various items by giving greater attention to ABC analysis.
- ❖ Ratio analysis techniques should be applied by the management of the concern under study on a regular basis for ascertaining and controlling the level of investment in inventories.

CONCLUSION

According to this study, inventory management the company is in the better position. The variables chosen for the study helped in determining the position of the concern consequently for the period of 5 years. The company's position in terms of finance as well as the logistics is satisfactory the study on inventory management concludes that the inventory plays a major role in deciding the return on the investments.

Regarding the current asset, it should be raised further means and the inventory's composition in it should be made in current proportion. Automatically it will ensure that the total assets are under control.

To conclude by considering the inventory and its position in the financial condition, the company Sri Aurobindo packagers pvt ltd, is in pinnacle stage in order to sustain the same position, the proper inventory management should be carried on and this will definitely help the company in meeting the fluctuating demands in turn build the reputation of the company.

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