PROJECT REPORT (17MBAPR407)

‘A STUDY ON INVENTORY MANAGEMENT AND CONTROLS’AT PIXEL CONTROLS’ BENGALURU.

BY

RENUKA Y

USN: 1AY17MBA42

Submitted to

VISEVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

In partial fulfilment of the requirements for the award of the degree of

MASTER OF BUSINESS ADMINISTRATION

Under the guidance of

InternalGuide:

SANDHYA.S

Assistant Professor
Department of MBA, AIT

ExternalGuide:

Mr. NARSIMHAREDDY

HR MANAGER
Pixel Controls, Bengaluru

Department of MBA, Acharya Institute of Technology

Soldevanahalli, Hessaraghatta Main Road, Bengaluru-107

March 2019

PIXEL CONTROLS
Serve Forever.....

Date: 16/02/2019

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. RENUKA Y** bearing USN **1AY17MBA42**, student of **Acharya Institute of Technology Bengaluru**. To pursuing MBA 4th semester as successfully completed her internship on "**PROJECT ON INVENTORY MANAGEMENT AND CONTROL AT PIXEL CONTROLS"** for a period of 6 weeks from **03/01/2019** to **16/02/2019.** During this association with us, she executed the work assigned to her very diligently.

During this tenure we found her to be very keen in learning. Her conduct during this period was satisfactory.

Regards

HR MANAGER

Bengaluru

PIXEL CONTROLS ★ BANGALORE ★

32, Kalyana Nagar, 'D' Group Employees Layout, Near The Great Eastern International Public School, Herohalli - Andrahalli Main Road, Bangalore - 560 091. Ph: 080-23245583, Website: www.pixelcontrols.com

ACHARYA INSTITUTE OF TECHNOLOGY
(Affiliated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi and Accredited by NBA and NAAC)

Date: 23/03/2019

CERTIFICATE

This is to certify that **Ms. Renuka Y** bearing USN **1AY17MBA42** is a bonafide student of Master of Business Administration course of the Institute 2017-19 batch, affiliated to Visvesvaraya Technological University, Belgaum. Project report on **"Inventory Management and Control at Pixel Controls, Bengaluru,"** is prepared by her under the guidance of **Prof. Sandhya S,** in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belgaum, Karnataka.

Signature of Internal Guide

Signature of HOD

23/3

Head of the Department
Department of MBA
Acharya Institute of Technology
Soldevanahlli, Bangalore-560 107

Signature of Principal/Dean Academics

Dr. Devarajaiah R.M.
Dean-Academics
ACHARYA INSTITUTE OF TECHNOLOGY
Bengaluru-107.

DECLARATION

I, **RENUKA Y** bearing USN **1AY17MBA42** hereby declare that the Project report entitled **"A STUDY ON INVENTORY MANAGEMENT AND CONTROL"** with reference to **"PIXEL CONTROLS"** prepared by me under the guidance of **Prof. Sandhya S**, Faculty of M.B.A Department, Acharya Institute of Technology and external assistance by **Mr. Narasimha Reddy**, HR manager, at PIXEL CONTROLS, Bengaluru.

It is also declared that this project work is towards the partial fulfilment of the university regulations for the award of degree of Master of Business Administration by Visvesvaraya Technological University, Belagavi.

I have undergone project for a period of six weeks. I further declare that this report is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University/Institution.

PLACE: BENGALURU
DATE:

Signature of the student

ACKNOWLEDGEMENTS

I wish to express my sincere thanks to our respected Principal, **Dr Prakash M R**, beloved Dean-Academics, **Dr. DEVARAJAIAH R M,** and deep sense of gratitude to **Dr. M M Bagali**, HOD, Acharya Institute of Technology, Bengaluru for their kind support and encouragement in completion of the Internship Report.

I would like to thank **Prof. Sandhya S**, Professor, Department of MBA, Acharya Institute of Technology, Bengaluru, and external guide **Mr. Narsimha Reddy**, HR manager, at Pixel controls, Bengaluru, who gave me golden opportunity to do this wonderful Project in the esteemed Organization, which helped me to learn various concepts.

Finally, I express my sincere thanks to my parents, friends and all the staff of MBA department of Acharya Institute of Technology for their valuable suggestions in completing this Project Report.

Place: Bengaluru RENUKA Y

Date: USN: 1AY17MBA42

TABLE OF CONTENTS

LIST OF TABLES

LIST OF GRAPHS

EXECUTIVE SUMMARY

Inventory is the most important part of current assets used by most Indian companies. The company uses a variety of stocks such as unfinished products, ongoing work, finished goods and transportation. Most companies invest more in inventory than other inputs. Properly maintaining assets helps companies earn revenue and maintain liquidity and reserves.

A study of subject inventory management will help to understand the inventory maintenance process at the Pixel Control Centre and will conduct a 6-week study to analyses inventory turnover and identify the problem. The motto of this study is to understand the technology and efficiency companies use to manage inventory.

An analysis of the two-year financial statements can lead to conclusions as to whether the company's performance is increasing or decreasing. The study shows that their performance is fluctuating and they must take various approaches to maintain inventory.

CHAPTER 1

INTRODUCTION

INTODUCTION ABOUT PROJECT:

Projects provide real-world experiences for people who want to explore or gain the knowledge and skills needed to get started in a particular career field. Internship is relatively short-term and focuses on participating in vocational training, taking the lessons learned in the classroom and applying it to the real world. Internships are an opportunity for students to gain practical experience.

Bengaluru has been enriched by exposure to pixel controls. First, Bengaluru, a pixel control, is an automation industry that offers a variety of products, such as fibre optic cables and Wi-Fi routers.

The overall experience at the company was average with support from company staff and responses from pixel control management during the first week.

When preparing the invoice bills, I was assigned a few tasks and watched the cable manufacturing process.

This report is a brief description of a one-month internship as a practical component of the second semester of the MBA. This project was carried out with the PIXEL CONTROLS company 03-01-2019 -16-02-2019. I would like to know about the impact of the service on the automation industry. When I started my internship, I set up some learning goals that I wanted to achieve.

1.1 INDUSTRY PROFILE

Industrial automation is the utilization of different control gadgets, for example, PC's/PLC's/DCS, which are utilized to control different elements of an industry and give programmed control execution without critical intercession of people. In ventures, the control methodology utilizes a lot of procedures that are actualized to accomplish the ideal yield or execution, making the automation framework most fundamental for the enterprises.

To identify automation and control problems, organizations utilize the ever-evolving technology in the control framework to create or assemble effective frameworks. This requires a high calibre and robust control framework. The new pattern of industrial automation manages the latest control devices and communication agreements to control field devices such as control valves and other last control components. Some of the brilliant gadgets or tools used in the mechanized industry can control the procedure and even the

corresponding capacity without interfacing with other field-level control devices such as PLCs.

The car business is developing at staggering rate. In any case, the objective remains fundamentally work all the more productively and convey item rapidly to the market.
The car fabricating aptitudes, key connection and automation and control arrangements improve the whole car production network they can accomplish the objectives experience and mastery toward the start of the worldwide program including worldwide detail structure advancement, reconciliation of IT and assembling framework, neighbourhood backing and machine developer coordination and work constrain preparing.

Industrial automation includes utilization of cutting-edge control procedures like course controls, present day control equipment gadgets as PLC's, sensors and different instruments for detecting the control factors, flag moulding hardware's to associate the signs to the control gadgets, drives and other noteworthy last control gadgets, independent processing frameworks, correspondence frameworks, disturbing and HMI (Human Machine Interface) frameworks.

Profound information of car producers' activities and procedure streamlining. The give thorough venture wide arrangements and administrations to support car producers and their tire providers.

Secure business process improves expanding fabricating flexibility, increment access to constant creation data, improve inventory network incorporation in big business.

1.2 COMPANY PROFILE

Pixel control is one of the greatest specialist co-op and provider in the industrial automation and correspondence field, which offers a functioning and aloof fibre segments to its real clients in iron and steel and telecom ventures since 2007.

Pixel controls perceived as a specialist organization as group of driving specialists in the industrial automation and correspondence documented to execute the establishment, charging and testing.

Pixel control is the organization which is having an extensive supply of fibre items, electrical items, organizing items. Pixel control respects every one of the solicitations for client from expansive to little items. As an answer accomplice, the organization is giving a total and all-around offset item go with which they can disentangle the perplexing answer for their clients.

Pixel control have fortified association with their clients and top to bottom information of their specialized group which permits pixel nonstop development.

Pixel controls become into an adaptable and dynamic counselling building firm in gathering, testing, raising and upkeep for the vitality business.

Pixel control really care about their customers and do whatever to convey total consumer loyalty. While organization pay attention to their task, they make the most of their work an incentive in the involved acquaintance.

Pixel control comprehend the benefit of having an accomplished and qualified power, so the organization have put resources into innovation preparing to guarantee that they administrations will have the aptitude to expertly the total their tasks

1.3 PROMOTERS

- Shankar Murthy:

  He is one of the founders of the pixel controls, he is from engineering background. And looks after the manufacturing and distribution process of pixel controls

- Narasimha Reddy:

  He is also one of the founders of pixel controls and plays the role of the Hr manager in pixel controls.

1.4 VISION MISSION AND QUALITY POLICY

VISION

“With a customer-oriented strategy to provide high quality products and timely technical services to enable our customers to implement their projects faster”

MISSION

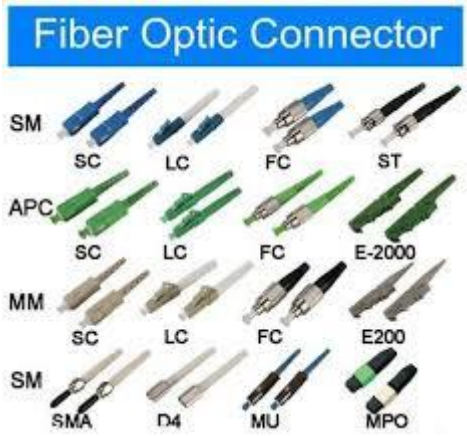
“Continuous commitment to our customer for innovative solutions at the most economical cost and stringent delivery schedules”

Quality policy

We strive to provide our customers with the highest quality products and services that meet our organization's goals and core values. To achieve this, we will continue to improve processes, products and services that meet our customers' expectations. Our quality policy provides a framework for defining and revising quality objectives, maintaining regulations, maintaining customer requirements, and ensuring continuous improvement.

1.5 PRODUCT / SERVICES

- **Fibre optic connectors and adopters**

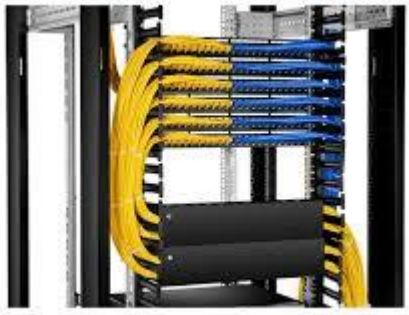


Optical connectors are one of the most important components for optical communication. It connects to connectors/connect with optical devices, modules and fibres. Two major zirconia ferrule sizes are used for optical connectors. They provide connections with consistent futures that use there own manufacturing zirconia ferrule. They have a range of connector kits and adapters for FC, MU, SC and LC configurations.

The two types of Fibre optic connectors and adopters are:

- Fibre splice tray
- Fibre slice closure

- **Patch panels / LIU**



A patch panel is a device or unit in which many sockets are generally similar or same. They can be used in a convenient way for the use of connection and a routing circuits for connections, texting of circuits and monitoring. They are designed to be flexible. Patch panels are deeply used in computer networks, radio, T V and recording studios.

The word PATCH comes from the first use in wireless studios and telephone, where it is possible to replace additional backup equipment for temporarily non-functional equipment. This cohesion was achieved through the patch cord and patch panel.

- **Fibre optic cable**

A fibre optic cable is two or more fibres that are collected like a cable but used to carry light. Fibre optic components are typically coated with coated plastic alone and provide a protective tube for the environment in which the cable is installed. Various cables can be used in a variety of applications, such as communications, or providing high-speed data collection between various parts of a building.

- **Media converters**

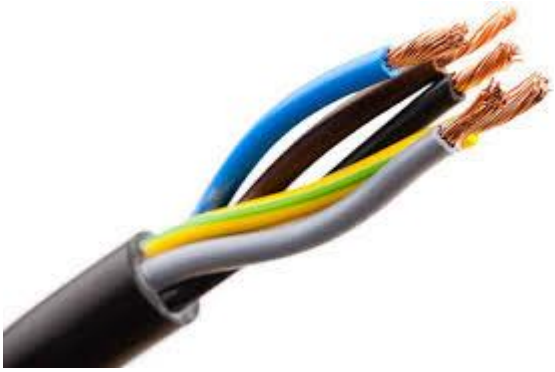
A media converter is a simple networking device that connects to uneven media types such as distorted pairing with fibre optic cabling. They were introduced to the industry in 1990's and are among the among the fibre optic cabling-based system that integrate with existing copper based, structured cabling system. They also use metropolitan area network (MAN) access and data transport services to enterprise users.

Types of media converters are as follows

- Small form factor plugging
- Fibre optic communication

- Gigabit interface converter

- **Communication cable**



Communication cables are electrical cables which is used to send information signals. Communication cables can be executed by optical fibres condensed connectors, copper condensers, or twisted wire joints.

In today's electronic world Communication cable plays an important part of every system of information.

Various types of communication cables are as follows:

- Serial cable
- Telephone cable
- Cable glands
- Ca5E/cat6 patch cables
- Power cables

- **Ethernet switches**

An ethernet switch is a connected device that creates a network connection between connected computers (allowing computer to communicate with each other). This is different from ethernet centre: although one centre sends all the ports to the next data pockets it understands the addressing scheme if a switch packet and only send a data packet to its destination port, the number of tools to be limited is at the same tim

- **Ethernet routers**

A router is a network tool that transfers data between computer networks. The router executes traffic instructions in the form of data packets for Internet data sent from the Internet, such as email and web pages. A packet is usually from a router to another network, and the network can access the Internet until it reaches the destination network.

The router is connected to two or more data lines on different networks. When the database has an arrow, the router reads the network address packet to determine the final destination. It then uses the information in the routing table as a routing policy to direct the packet to the next network.

1.6 AREAS OF OPERATION

- Pixel Control #32, Kalyan nagara D group employees' layout near the great eastern International public school, lingaderanhalli, Bengaluru-91
- Installation, Commissioning, Testing
- Electronics, Electrical and Telecom product supply

1.7 INFRASTRUCTURE FACILITY

- Good cabins with more than 30 computers
- Provides water and air conditioning to the employees in the office
- Good ventilation facility.
- The land is spread around 1800sqft with well-furnished manufacturing equipment's.

Equipment includes

- Automatic and manual equipment
- Cycling testing equipment
- High speed automatic coilers for long run purpose
- Commissioning and erection equipment

1.8 COMPITATORS

Madox technology pvt. Ltd

Madox technologies pvt, ltd is a certified engineering and manufacturing solution company which got incorporated in 2009. The headquarter is located in Bengaluru with the team of 60+ employees. In 2010 Madox technologies started panel manufacturing. Madox technologies become private limited company and started giving Turn key automation solution in 2013 and in 2014 it become an ISO 9001-2008 companies. Madox technologies an office in KSA for middle east marketing with an alliance. It became an ISO 9001-2015 company team strength as increase to 50+ in 2016.

Anubhavi automation

Anubhavi automation was established in 2004 as a proprietorship company and later turned as a partnership firm in 2009. It is a full-service provider of automated industrial control system. The core of Anubhavi automation business philosophy is to provide the highest level of quality products combined with customer services.

Anubhavi automation take up projects on complete turn key basis where the complete consulting desire hardware and software supply and commissioning is carried out.

Power dot automation

Power dot automation is registered in 2012 located in Bengaluru which gained immense expertise in offering industrial automation, Scada system, installation of PLC drives etc. power dot automation place as a service provider/ supplier/ trading company.

Ellen automation

Ellen automation is an acknowledged organisation which is a sole proprietorship-based company which engaged as manufacturer of control panel, bobbin winder machine etc.

Ellen automation was established in 2009 at Bengaluru, which holds specialisation in rendering CNC retrofitting services and PLC automation services. The team members of Allen automation are well experience in electrical control panel and machine tool industry for the past many years. The company involves in the projects with major companies all over India.

Venson electric private limited

Founded in 1973, Venson Electric is a small industrial manufacturing custom control and protection device for power generation, transmission and distribution switchgear. Today, it is the leading manufacturer of relay panels with voltages up to 220kv.

Venson Electric Private Limited enters the 400kv protection department to provide more products for important projects in India and export the products to other countries. Benson enjoys a good market reputation.

SUPINCO automation private limited

SpinCo automation is operating its business from 2005. It is the subsidiary company of SUPCON which is working for Indian projects in different segments like including design, engineering, supply, commissioning. The global engineering centre is located in Bengaluru.

1.9 SWOT ANALYSIS

STRENGTH:

1. Products identified for renovation and excellence
2. Acquires the plant broad optimisation technique reach productivity and effectiveness
3. There is a flexible, technical automation solution for low cost to design
4. Demonstrates integrated architecture for enhancing efficiency and productivity on the customer's organisation.
5. Dedicated customer relationship management as able to reach a high level of customer satisfaction

WEAKNESSES:

1. Lack of skilled workers
2. Cost of raw material will increase
3. Increasing cost of energy
4. Different laws fluctuations regarding the production standards in the markets can be challenged in various markets given by the company

OPPURTUNITIES:

1. Research and development
2. A huge investment through emerging markets in automation and technology
3. Lot leveraging to improve the company's integrated enterprise visions
4. New technology provides the opportunity to practice the division pricing strategy in the new market

THREATS:

1. Serious competition leads to limited growth in market share.
2. Low margins can hurt economic instability.
3. Furthermore, the demand for manufacturers is not comparable to its competitors.
4. The financial planning is not effective and efficient.
5. Limited success outside main business.

1.10 FUTURE GROWTH AND PROSPECTS

Pixel controls are looking for the opportunity to get maximum profit at the lower cost. Their hard-earned money will be fully utilized for the benefit of their future.

The company is planning to expand their services to other automation industries, and also it is planning to provide services to the power generation industries like Jindal coal, solar, water power generation etc,

In future pixel controls is planning to provide services to telecommunication sector such as installation and commissioning, and also it expands its production unit.

1.12 FINANCIAL STATEMENTS

PROFIT & LOSS ACCOUNT DURING THE YEAR ENDED MARCH 31,2016

Particulars	**Amount**	**Particulars**	**Amount**
Opening Stock	63400	**Sales Accounts:**	
Purchase Accounts:		Sales	6062340
Purchase	3561066		
Purchase Imports	1494734	Closing Stock	904994
Product Assembly Charges	595141		
Gross Profit C/d	**1252993**		
	6967334		**6967334**
Salary & Wages	1793290	**Gross Profit B/d**	**1252993**
Travelling & Conveyance	1216680		
Guest House Charges	1182500	Interest on IT Refund FY	
Loading & Boarding	960057	2013-14	39820
Office Expenses	593931		

Fuel Expenses Reimbursement	546714	Interest on IT Refund FY	19120
Import Duty Paid	332746	2014-15	16825
Vehicle Maintenance	269390	Freight Charges	7991701
Computer Maintenance	225788	Service Income	
PF employee Contribution	215123		
PF & PPF Employer Contribution	215123		
Postage & Courier Charges	212732		
Employees State Insurance Corporation	120503		
Rent Paid	60000		
Repair & Maintenance Charges	40563		
Interest & Service Charges	34168		
Audit Fee	22000		
Admin Charges	18140		
Rate & Taxes	16816		
IDLI Charges	8998		
Bank Charges	6699		
Donation Paid	2000		
Round Off	19		
Depreciation	8516		
Net Profit Transfer to P&L adj Account	**1217965**		
	9320461		**9320461**

BALANCESHEET AS AT MARCH 31,2016

Liabilities	**Sch No**	**Amount**	**Assets**	**Sch No**	**Amount**
Partner's Capital Account	1		Fixed Assets	4	50319
Shankar Murthy N		500000	Advances and Deposits	5	862567
Venkataramana Reddy		600000			
			Sundry Debtors	6	1219218

Partner's Current Account			Cash & Bank Balance	7	119090
Shankar Murthy-Working Partner		458019	Closing Stock		904994
Venkatraman Reddy		178235			
Current Liabilities & Provisions	2	637011			
Sundry Creditors	3	782921			
		3156188			**3156188**

PROFIT & LOSS ACCOUNT DURING THE YEAR ENDED MARCH 31,2017

Particulars	**Amount**	**Particular**	**AMOUNT**
Opening Stock	904994	**Sales Accounts:**	
Purchase Accounts:		Sales	10345792
Purchase	7,305,172		
Purchase Imports	1,453,990	Closing Stock	954994
Gross Profit C/d	1,636,631		
	11300786		**11300786**
Salary & Wages	2418226	**Gross Profit B/d**	1636631
Travelling & Conveyance	2516157		
Guest House Charges	2011005	Interest on IT Refund	23544
Loading & Boarding	2272860	Freight income	34837
Office Expenses	831522	Service income	13,271,072
Fuel Expenses Reimbursement	803000		
Product assembly charges	675331		
ESIC Employer contribution	172938		
Vehicle Maintenance	405074		
Computer Maintenance	270000		
PF employee Contribution	290187		

Postage & Courier Charges	346105		
Rent Paid	180000		
Repair & Maintenance Charges	179228		
Interest & Service Charges			
Audit Fee	15550		
Admin Charges	30000		
Electricity charges	30954		
Freight charges	18880		
EDLI Charges	74294		
Bank Charges	12140		
PT(VAT)	15298		
Input SBC @0.5%	4000		
Round Off	232		
	26		
Depreciation			
	43587		
Net Profit Transfer to P&L adj Account	1349490		
TOTAL	**14966084**		**14966084**

BALANCESHEET AS AT MARCH 31,2017

Liabilities	**Sch No**	**Amount**	**Assets**	**Sch No**	**Amount**
Partner's Capital Account	1		Fixed Assets	4	198942
Shankar Murthy N		500000	Advances and Deposits	5	1574633
Venkataramana Reddy		600000			
			Sundry Debtors	6	1021934
Partner's Current Account			Cash & Bank Balance	7	219053
Shankar Murthy		471352			
Venkataramana Reddy		544819	Closing Stock		954994
Current Liabilities & Provisions	2	1264608			

Sundry Creditors	3	588777			
TOTAL		**3969556**	**TOTAL**		**3969556**

Chapter 2

Conceptual background and literature review

2.1 THEARITICAL BACKGROUND OF THE TOPIC

Inventory meaning:

Inventory is a list of goods and materials in stock, or goods and materials themselves. It is also used for a list of family content and a list of wills of the deceased. Accounting is considered an asset in inventory

Inventory Management and Control

Inventory management and control alludes to the way toward taking care of non-promoted resources. It is a key procedure in store network management and screens the development of merchandise from maker to distribution center, and from stockroom to the end client. Basic to this procedure is the keeping of a definite record of every single item.

Inventory control tries to strike the sensitive harmony between limiting inventory costs and the capacity to fulfill client demands in a convenient way. Incidentally, inventory control and inventory management can be utilized reciprocally.

Objectives of inventory management

Ultimately inventory management has to maintain a delicate balance between two objectives. It needs to maintain stock levels that are sufficiently:

- High enough to make production and sales activities smooth and profitable
- Low enough to keep costs low and maximize profitability.

Benefits

- Continuous supply of raw material and finished goods for consistent production
- Reduction of inventory associated costs including theft, obsolescence and wastage etc.
- Maximum customer satisfaction with timely and effective distribution

TYPES OF INVENTORIES

Inventory plays an important part in your corporate or depends on the character of your business. Inventories can be categorized as:

(I) Raw Materials

Materials and machineries planned used for the production of products. These are the undeveloped inputs that are converted to finished products through the manufacturing process. Raw material stocks are those that have been purchased and stored for future production.

(II) Work in progression / Progress

It began to be transformed into the finished materials and components. The material sent to the stationary floor is not finished yet, and the added value of the labour cost is high.

(III) Finished Goods

The finished product is a finished part that can be prepared for buyer orders. These goods have been reviewed and passed the final examination requirements in order to transfer them to the WIP and finished goods inventory. From this point of view, the finished product can be sold directly to their end users, sold to retailers, sold to wholesalers, sent to distribution centres, or expected customer orders.

STORES & SPARES

The Four levels of inventory depend on the character of your business. Consumables contains office and cleaning materials such as soap, broom, oil, light, blub, and so on. These materials do not go directly to production but require a production process.

ESSENTIALS OF INVENTORY CONTROL

- Trading motives:

Every single company must maintain a level of inventory to meet the everyday requirements of sales, production processes, and customer needs. Both finished goods and raw materials are kept in stock for the company to produce smoothly.

- Preventive motives:

Companies must keep inventory in place for unpredictable situations such as losses, strikes, and deployments due to natural disasters in a specific area, so the company must have finished products and raw materials that are environmentally friendly.

- Speculative Motivation:

Companies can maintain some inventories to take advantage of opportunities to profit from price fluctuations.

THE BASIC REASON FOR SAVING INVENTORY:

There are three basic reasons for keeping inventory:

1. Time:

The time lag in the supply chain, from each stage of the supplier to the user, you are required to retain a certain quantity of inventory in this "advance period".

2. Uncertainty:

Inventory is preserved as a buffer to encounter the uncertainty of demand, supply and cargo flows.

3. Economies of scale:

The ideal conditions of "one unit at a time when the user needs it, when he needs it" often have a large cost in logistics. So bulk purchases, mobile and storage bring.

INVENTORY MANAGEMENT INVOLVES:

Inventory management is an active control program that allows management of sales purchases and payments.

Identify inventory requirements, set goals, provide replenishment techniques, and systems and processes to report actual and expected inventory status.

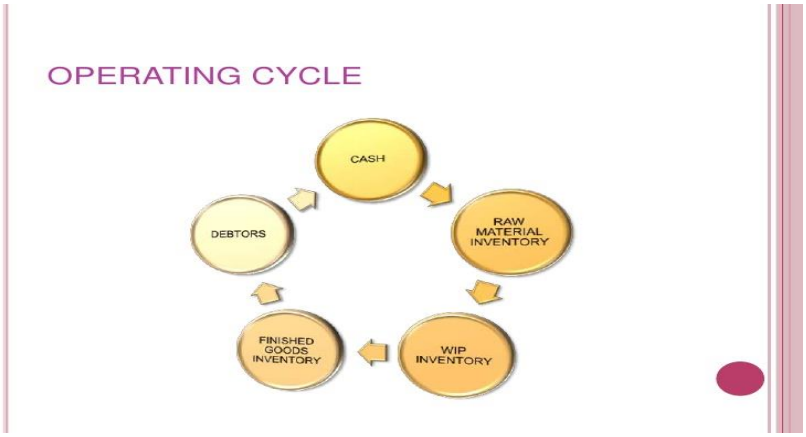
Inventory management helps to provide a good understanding of the foundation and ability to control the financial costs.

Inventory management will control operating costs and provide a better understanding.

INVENTORY MANAGEMENT OPERATION CYCLE

The operating cycle is the duration of change of resources into inventions and conversions into sales, and there is a variance between current assets and fixed assets. It takes years for a company to recover the initial investment in fixed assets such as factories and machinery or land buildings or furniture and fixtures. Instead, investments in liquid assets such as inventory and book debt are appreciated during the company's business cycle. less than a year. The operating cycle can be said as the core of working capital. It has been observed, the need for working capital or liquid assets cannot be overemphasized. The main motivation for many commercial companies is to achieve maximum profit, which can be obtained based on the size

of the sales. Though, sales are not immediately converted to cash. There is a constant time difference among merchandise sales and cash income. Therefore, it is necessary for liquid assets to deal with the issue of selling in the form of liquid assets. Therefore, sufficient working capital needs to maintain sales activities. Theoretically, this is called the operating cash cycle. Constant flow forms the so-called operational cycle of cash supply to inventory to accounts receivable and returns to cash.



The operating cycle of a manufacturing company is divided into three stages.

1.Securing resources

2. Manufactured products

3. Sales of products

1. Securing resources: -

In the first stage of the operating cycle, the completely required raw materials, fuel and power stages or manufactured products

2. Manufactured products: -

In the second stage of the work cycle, the raw material is converted to the working InProgress and the ongoing product is converted to the finished product.

3. Product sales: -

In the third stage of the operating cycle, you can sell your product and provide credit to your customers

REASONS AND BENEFITS OF INVENTORY:

Maintaining the best inventory levels stays subjective and depends on the characteristics of the specific company.

Trading company:

If you are a trading company, there may be several reasons why you should have inventory, as sales should not be discontinued, there is always a delay between purchases and sales as long as there are sales opportunities, and products are not always available. Therefore, the commodity should focus on some finished goods inventory to perform its sales activities independently of the procurement plan.

Similarly, companies can offer a variety of incentives in terms of quantity discounts or low cost of goods suppliers. A list of transaction issues allows you to distinguish between opportunities for sales activities and discounts. Profit capitalization lowers total investment, resulting in high profits for the company.

Manufacture company:

In addition to finished products, manufacturers must also proceed with raw resources and work for the following reasons:

Continuous production planning

All manufacturing companies must have enough raw resources for a regular, uninterrupted production plan. If raw materials are in stock, we will have a non-stop production plan on a regular basis. If you have a stock of raw materials at all stages of the production process, you can reduce your total production by half. Without production, products cannot be delivered on time at a fixed cost, which can result in user-defined dissatisfaction.

With more work, you can go smoothly through the production process. Work in progress on most manufacturing company issues a natural outcome of the production plan and helps to fulfil specific orders even if the supply of raw materials is discontinued.

FUNDAMENTALS OF INVENTORY CONTROL

Significant necessities for inventory control are:

• Companies need an inventory management scheme to effectively manage the inventories.

• Use materials, material standardization and simplification to properly classify materials.

• Internal inspection system operation - ensures that all transactions including materials and equipment are inspected by independent personnel with appropriate authorization.

• Run a permanent inventory system to determine the quantity and value of each material in the inventory at any time.

• Appropriate material evaluation methods are important because they affect work cost and material inventory values.

PURPOSES OF INVENTORY MANAGEMENT

The main purpose of inventory management are as follows.

1. To Maintain large inventories for efficient and smooth production and sales operations.

2. To Maintain minimum inventory investment to maximize profitability.

3. To Ensure continuous supply of raw materials and production without interruption of facilities.

4. Prediction of sufficient raw material inventories and price fluctuations in case of short supply.

5. To Maintain adequate finished goods inventory for smooth sales activities and efficient customer service.

6. To Minimize transportation costs and time.

7. To Control inventory investments and keep them at optimal levels.

Merits of Inventory Management

The proposed benefits are as follows:

1. Eliminate waste of used materials.

2. Reduce the risk of loss from fraud and theft.

It will help you keep a permanent inventory and other records to promote.

Be prepared to manage accurate material reports.

4. Reduce stock funds.

5. Reduce storage costs.

De merits of inventory Management

Every company must maintain the best inventory levels. The following is not the result of the loss form.

1. Opportunity Cost: Every company must maintain inventory because it requires some investment, namely opportunity cost and processing of inventory investment, and more is that funds are blocked by inventory.

2. Excessive inventory: Liquidity risks due to excessive transportation costs will result in serious losses. It is also known as the hazard level.

3. Insufficient stock: Another risk factor is overproduction and failure to meet delivery commitments. Inventors with sufficient raw materials and work in progress will result in frequent production interruptions. It does not have enough goods to complete, and regular customers could turn to competitors.

4. Danger due to physical decoration: One of the reasons for inventory due to high inventory levels is that inventory has deteriorated due to poor handling or improper storage facilities due to time.

Cost related to inventory:

Because each company has inventories based on company requirements and other characteristics, it costs a little to hold these stocks as follows:

• Carrying Cost:

This is the cost of storing or preserving a stock of unfinished products, semi-finished products or finished products. This includes two basic costs.

• Storage costs:

This includes the cost of the company that stores the unit or raw materials. This cost can be used to store the material. Space rents are like inventory, safety inventory, infrastructure costs, insurance costs, theft costs, storage costs, and processing costs.

• Financial costs:

This cost includes the cost of capital invested in inventory. Contains stock investment returns required for storage costs and more. Therefore, the carrying value includes the actual costs and opportunity costs associated with the funds invested in the inventory.

Total shipping costs are fully variable and proportional to the level of inventory shipped.

Total shipping cost = (per unit shipping cost) X (average stock)

• Subscription fee:

The subscription fee includes the stock acquisition fee. The cost of preparing and executing orders includes paperwork costs and communication with suppliers.

The total order cost is inversely proportional to the company's annual inventory. Order costs can have fixed components that are unaffected by the size of the order, and there may be a component that is variable depending on the size of the order.

Order total cost = (number of orders) X (cost per order).

• Inventory cost:

Also called hidden cost. The absence of inventory indicates a situation where the company does not have a product, but the store or production department needs the product. Out of stock represents zero level inventory. For companies with lost sales or return orders, the cost is insufficient. Out of stock is generally expensive.

Company goodwill will be affected by customer complaints. In the case of finished products, the production process may be interrupted by raw materials or work in progress, and the business may be lost because the employee pays the product at this cost. I do not have time. Transportation costs and ordering costs are opposed and collective. They have decided the level of the inventor of the company. Total cost = (cost of purchased item) + (total shipping cost and order cost)

2.2 LITERATURE REVIEW

Inventory management has a significant impact on the company's business performance. Inventory management involves purchasing, acquiring, storing, storing and selling processes, including technical methods, management systems and mechanisms. This white paper starts with inventory management goals and theoretically analyses the current situation of inventory management and the problems that exist in Chinese enterprises.

Inventory management is an enterprise inventory management that effectively manages inventory management, including managing inventory information and making decisions based on this information analysis, achieving ultimate goals, and improving economic efficiency. Inventory management includes procurement, acquisition, storage, storage and sales processes, including technical methods, management systems and mechanisms. Inventory

management technical methods include determining the time of inventory purchase, the quantity purchased, the maximum and minimum quantity of inventory, and so on.

1.Ahmad Kamilah & Shafie Mohamed Zabri (2016) the inventory management acts as a factor in identifying how company controls its inventory flow. In micro enterprises they maintain inventory both systematically and unsystematically. The main activity of micro enterprise is to buy and store the inventory, the knowledge and skill of the manager plays a major role in proper control of the inventory.

2.Schmelzer. P (1976) the banking sector maintain various inventories to satisfy their customer. The various cost involved in maintaining the inventories are: cost involved in maintaining, and the cost involved in allocation of such inventories to different departments. The bank usually will not inquire about the inventory turnover. The most correct way to measure inventory in bank is to find the ratios of inventory to assets so that it is easy to identify the trends involved in supply costs. The inventory manager in bank has to analyse the profit same like they do in the industry.

3.Besta. P, Janovska. K & Lampa. M (2012) the crises of the economy have impact on the industries, therefore they are forced to save in all areas. The industry has to make a proper purchase planning and utilise the inventory so that they earn profit. They have to maintain inventory in such a way that they are not over-stocked or under-stocked. The firm should be able to meet the demand of the customers.

4.Capkun, Vedran & Lawrence (2009) the study was to find the relationship between the total inventory and its separate components, and its impact on the financial performance. The interrelation between the components of the inventory and the financial performance slightly vary based on the type of inventory used in their manufacturing process.

5.Shin & Seungiae (2015) the study which was conducted in the manufacturing organisation revels the relationship between the financial profitability and inventory management. In many manufacturing firms if they concentrate on the inventory management there is a decline in the financial standard of the organisation. The small organisation take advantage from the inventory when compared to the medium and large firms.

6.Worthington & Paula. R (1998) the study states that business cycle does not reveals the behaviour of the inventory. The rapid changes in the inventory management has reduced in the manufacturing firm. The changes in the inventory investments varies according to the sectors.

7.Kontus & Eleonora (2014) the primary study was conducted to analyse how the organisation balance its inventory and secondly, to know the dependency between inventory and profitability. The inventory should be managed taking into consideration both the profitability and the carrying cost involved in maintaining such inventory. The inventory level in the organisation has to be changed so as to improve the profit.

8.Biggart & Timothy. B (2002) just in time has changed the concept of the inventory management. This study focuses on the impact of Just in Time on inventory to sales ratio. It reveals that inventory to sales ratio reduce after implementing JIT; but there is no change in work in progress to finished goods and sales ratio.

9.Sha & Ping BA (2014) the study reveals that demand forecasting acts as a basis for inventory management. A proper maintenance of inventory helps the firm to withstand the competitiveness of the firm. The firm has to first understand the demand for the product and analyse the inventory required for the meeting the demand and it is easy for the firm to reduce the cost involved in the inventory.

10.Denton. D & Keith (1994) the syntax agribusiness reduced their inventory by assigning the responsibility to the purchasing department to evaluate the vendors and eliminate. The proper flow of the inventory from the suppliers helps the firms to reduce the cost of inventory. The proper planning by the top management helped to reduce the inventory cost.

11.Reynolds & Dennis (1999) the study was conducted in a food industry which has diverse menus which frequently changes. Therefore, the author suggest that the inventory has to be periodically analysed to know the inventory turnover through which the operator can maximize the inventory investment and they can measure the process of inventory management so that they identify the problems and overcoming such problems and improving the practices of the inventory management.

12.Lambert & Douglas. M (1982) the study defines the degree to which the firm can use inventory carrying cost and calculating the carrying cost with the data available. These carrying costs of the inventory play a major role in decision making. The management they feel that the major position of the financing is for inventory. Therefore, the distribution managers have to decide on the inventory carrying cost.

13.Aijuan Zou (2012) this study reveals that the proper inventory management helps in the improvement of the economy and helps in the growth of the project by minimising the stock in the normal situation. The management has to look into the order cycle, lead time, and minimum stocks during the project construction.

14.Denton. D & Keith (1994) the syntax agribusiness reduced their inventory by assigning the responsibility to the purchasing department to evaluate the vendors and eliminate. The proper flow of the inventory from the suppliers helps the firms to reduce the cost of inventory. The proper planning by the top management helped to reduce the inventory cost.

15.Reynolds & Dennis (1999) the study was conducted in a food industry which has diverse menus which frequently changes. Therefore, the author suggest that the inventory has to be periodically analysed to know the inventory turnover through which the operator can maximize the inventory investment and they can measure the process of inventory management so that they identify the problems and overcoming such problems and improving the practices of the inventory management.

16.Lambert & Douglas. M (1982) the study defines the degree to which the firm can use inventory carrying cost and calculating the carrying cost with the data available. These carrying costs of the inventory play a major role in decision making. The management they feel that the major position of the financing is for inventory. Therefore, the distribution managers have to decide on the inventory carrying cost.

17.Aijuan Zou (2012) this study reveals that the proper inventory management helps in the improvement of the economy and helps in the growth of the project by minimising the stock in the normal situation. The management has to look into the order cycle, lead time, and minimum stocks during the project construction.

18.Millstein, Mitchell A & Haitao (2014) the earlier method of managing inventory is by classifying the items into various classes. This approach is called as ABC analysis, where they are classified based on the importance to the organisation. Due to the drawbacks of the ABC analysis the author has introduced the optimization model in this the inventory is grouped based on the quality. This model can be implemented in the real work environment.

19.Bennett & Solon. A (1985) this study was conducted in the rural electric cooperation to improve their inventory management. This includes all the activity related to the inventory such as purchasing, storing, distributing the products. If the material is under-stocked it indicates that the firms inventory planning is poor. The modern technology has helped the manager in maintaining the inventory level through computerised method which helps in monitoring the functions of the inventory.

20.Van Bode graven, Arthur & John (1987) this study tells us about the inventory maintained in the warehouse. There are various problems involved in maintaining the inventory in the warehouse like shortage, leakage, damage etc. this problem may be due to the improper inventory management or lack of proper classification of inventory based on the feature of the items. This problem can be solved by assigning responsibility to the personnel, set the target, identify the surplus inventory, and taking proper decision on inventory by senior management.

21.Goonatilake & Lalith (1990) in developed countries the policies are adopted by taking inventory into consideration. The proper planning of the inventory helps the organisation to grow. The industries have to adopt proper techniques for the inventory control. The industries in the developed countries has to focus on the efficiency of the inventory management rather than its cost.

22.Roekchamnong, Pongsa & Anant (2014) this study was conducted to know the relationship between the uncertainty in price and inventory management, sales ratio to inventory. The uncertainty in the price of the petroleum products have impact on the inventory management.

23.Anonymous (1992) the data of inventory is necessary for the firm to analyse its profit and it helps to understand the working of the business. The inventory includes the items required by the firm to produce a finished product example: raw material, semi-finished goods, and finished goods. The modern technology helps the firm to keep a track on the inventory which are moving in and out of the organisation

24.Dubelaar & Chris (2001) the proper maintenance of the inventory helps the retail industry. The survey says that the sales is double the inventory. The author tells that there is a relationship between the inventory and sales.

25.Anonymous (2001) the study was conducted more on the typical retailer because most of the media they focus on the large-scale retailer. These typical retailers they do not adopt the new technology to maintain the inventory and suppliers. Therefore, they have to adopt the technology with caution as they are into new technology.

26.Hsieh & Brian. H (1992) the study states if the firm maintain proper inventory, they can satisfy the customer through their services and better utilisation of material and labour. JIT and material requirement planning helps in improving the planning of inventory and accepting the changes in the market quickly and even it improves the quality of the product.

27.Rodney. J, Simmons & Cheng (2013) in this study it states that the aerospace producer has to decrease the inventory turnover and give importance to the fault tree analysis. The company used to plan their inventory using the capacity of the material, by following the earlier method they found that the inventory cost and turnover is high. Therefore, the use of FTA the manufacturer can solve the problem of the inventory.

28.Hadley & Scott. W (2004) this study states that the business has to maintain the safety stocks in order to protect themselves from the uncertainty. There are many reasons for the inventory uncertainty the major three reasons are inventory accuracy, supply, and demand. Demand is the important reason because the actual demand and the forecasted demand differs as they may be deviation. Sometimes supply deviations occur due to delay in the delivery, quality and the quantity of the product.

29.Fiora, Christopher R & Pitzer (1986) this study was conducted by the author in the steel manufacturing industry to analyse how they control the inventory in the organisation. There major inventory is in the process of production. They believe that their inputs are equal to that of the output.

30.Phull, Seema & Lawton (2016) the study states that every inventory does not have equal advantages in the business. It is difficult for the company to know various inventories and their cost that affect the success of the firm. The firm has to comprehend the product and location in which form the inventory is required.

31.Cox & James. F (1986) the author has studied inventory in the pharmaceutical, because the pharmacy is the major component in hospital environment. It is necessary for the hospital to maintain their inventory, they have to ensure that all the drugs are available in adequate quantity. The inventory has to be managed properly because the proper management helps to reduce the cost involved in handling the inventory.

32.Natarajan. R (1991) this study states that the firm has realised that there is a need for the change in the method of managing the inventory. Inventory Management is not a narrow concept for the study it has to be widened. The flow of the inventory has to be analysed because it helps to understand the loopholes of the inventory management. They have to implement the simple tools for managing the inventory.

33.Ballou & Ronald. H (2000) Managing the inventory is the main concern of the senior manager. Therefore, they developed formula to practice a proper inventory management. This formula is used for managing or controlling of the inventory and analysing the impact of changing the procedure or how it affects the new plan for inventory.

34.Waller & Matthew. A (2006) This study states the issues that retail outlet faces due to the inventory levels, customer demand, and variation in the approaches. The proper maintain of the inventory level helps to meet the demand of the customer.

CHAPTER-3

RESEARCH DESIGN

RESEARCH DESIGN:

The research design features a strategy and methodology that allows the analyst to participate in different parts of the research in a reasonably consistent manner, with the goal of effectively addressing inspection problems. Provides a knowledge of how to guide research using specific systems. Each question should be investigated through a research design as a list of research questions.

3.1 STATEMENT OF THE PROBLEM

There are many problems that can cause serious damage to inventory management. Some are more often than others. Here are some common questions about the inventory system.
The company's current inventory management system does not specify inventories that cause a stock panic in an emergency. At the end of each day, the data has not updated correctly. No appropriate data security system is available. Yearly maintenance is not provided. The record was not upheld properly.

TITLE OF THE PROJECT

A Report On "Inventory Management and Control" At Pixel Controls, Bengaluru.

3.2 NEED OF STUDY

Inventory is the same as cash and is an important part of the total cost. Inventory must be adequately protected and properly calculated. Proper inventory management can make a important contribution to the effectiveness of your business. The achievement of a company's depends on effective procurement, storing, consumption and accounting. Since inventory is an important part of the bulk inventory management study, we chose pixel control

3.3 OBJECTIVES OF THE STUDY

- To analyze the inventory levels those are sufficient to perform production and sales activities smoothly.
- To study the inventory management techniques followed in pixel controls
- To identify the existing levels of inventory maintenance and its effectiveness.
- To summarize the findings, conclude and offer valid suggestions.

3.4 SCOPE OF THE STUDY

- The study helps the management to improve its profitability through a reduction in non-moving inventory. It develops the policies for both continuous review of inventory management system
- The study helps to show the level of the inventory in the organization. The company will make the proper inventory methods from the suggestions of the study.

3.5 RESEARCH METHODOLOGY

The Descriptive sort of research has been applied in the look at. This studies searcher has no control over the variables. Only reviews what has come about or what's taking place. The studies can be most effective and discover reasons but can't manage the variables

Data collection

This study only based on number one and secondary sources of facts. The necessary data calculated from annual record, books, journals and websites.

- PRIMARY DATA:

Primary information or clean facts are the ones facts that are created very first time with the help of primary statistics we framed the studies targets. Primary statistics as the correct, plausible, dependable and beneficial information.

Personal interaction and commentary

- SECONDARY DATA:

The secondary facts are those records which are previously in presence for precise cause, we use the secondary records about inventory to observe old facts of the organization, for the day-to-day statistics about the substances are proven within the ledger records and day by day troubles slip of materials, business enterprise internet site, magazines, journals, news paresthesia purchase sign up and other documentary evidence used for the findings. In the evaluation of the inventory, the secondary facts supplied isn't sufficient then we accumulated primary statistics.

HYPOTHESIS

Hypothesis 1

H0: There is a courting among operating capital and agency's profitability and liquidity.

H1: liquidity and profitability are negatively associated with the running capital of the agency.

Hypothesis 2

H0: There isn't any relationship among size of the firm and profitability.

H2: There is high-quality relationship between the dimensions of the firm and the profitability.

3.6 LIMITATIONS OF THE STUDY

- Due to time constraints, detailed research on all materials is not possible.
- The company keeps some information confidential and therefore cannot conduct detailed research.
- Due to time constraints, the study was limited to 6 weeks.
- Research is limited to selected components of the company

3.7 CHAPTER SCHEME

CHAPTER 1: INTRODUCTION

It consists of brief introduction about the project, introduction about inventory management control, industry profile, company profile, promoters, vision, mission, and quality policy, product / service, areas of operation, infrastructure facility, competitors, SWOT analysis, Future growth and prospectus and Financial statement.

CHAPTER 2: CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

Meaning of inventory, types of inventories, basic reasons to keeping an inventory, inventory management, operating cycle of inventory management, reasons and benefits of inventory, essential of inventory management and control, purposes of inventory management control, merits and demerits of inventory management control, literature review.

CHAPTER 3: RESEARCH DESIGN

It consists of statement of the problem, title of the study, need of the study, Objectives of the study, scope of the study, research methodology, limitations of the study, chapter scheme.

CHAPTER 4: DATA ANALYSIS

It consists of tools used in inventory management and control

- Techniques used in inventory management and control
- Ratio analysis

CHAPTER 5:

It consists of Findings and suggestions**,** conclusions and bibliography.

CHAPTER-IV

DATA ANALYSIS

4.1 TOOLS USED IN INVENTORY MANAGEMENT AND CONTROL

- **Technique of Inventory Management:**

The key problems in inventory management are:

What are the inventory management issues in Indus?

Which inventory policy is best for Wutong? Why? Displays the calculation.

What should I exceed the level?

To answer these following techniques are used:

- ABC analysis
- Economic Order Quantity
- VED Analysis
- Re-Order Level
- Safety stock

ABC Analysis

This is created on the following propositions such as:

- Management projects and hard work are scary and restricted.
- Some inventory substances are more significant than others.

Category	% of items	% of total cost items
A	5-10	70-85
B	10-20	10-20
C	70-85	5-10

The ABC analysis divides the various items into three groups or priority groups and assigns management tasks according to their priority. The most important items are classified as Category A, the middle important items as "Class B", and the remaining items as Class C. '. Financial managers should monitor items that belong to multiple project groups that are monitored on a consumption-by-priority basis.

The most valuable project priority, will decide soon be controlled with a low-value projects. The reasonable limitations are as follows.

Procedure

(I) The project with the highest value will soon be given priority.

(2) The cumulative total amount of annual consumption is expressed as a percentage of the total consumption value.

(III) This percentage value is divided into three categories.

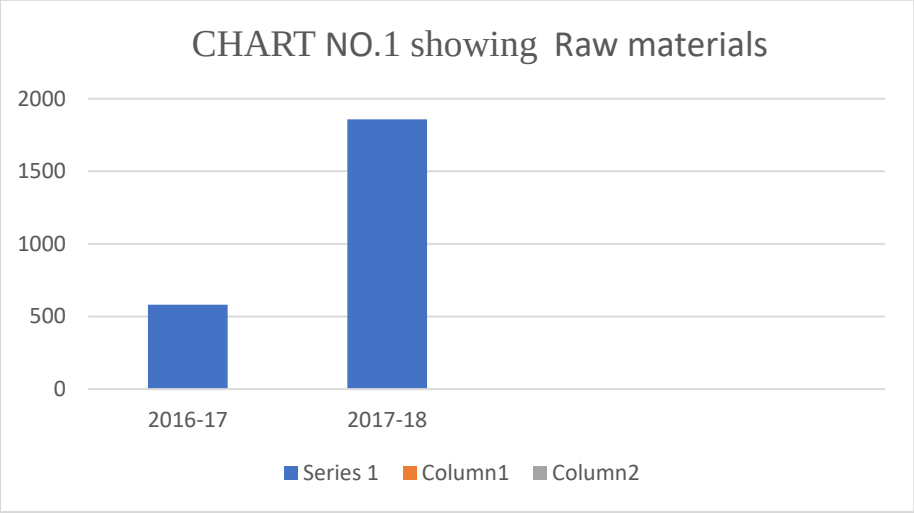
ABC analysis helps you assign management tasks based on the position of various inventory items

ABC Analysis

Raw material (at closing stock)

TABLE NO:1 Table showing data of raw materials

YEAR	AMOUNT OF RAW MATERIALS
2015-16	582.11
2016-17	1858.17



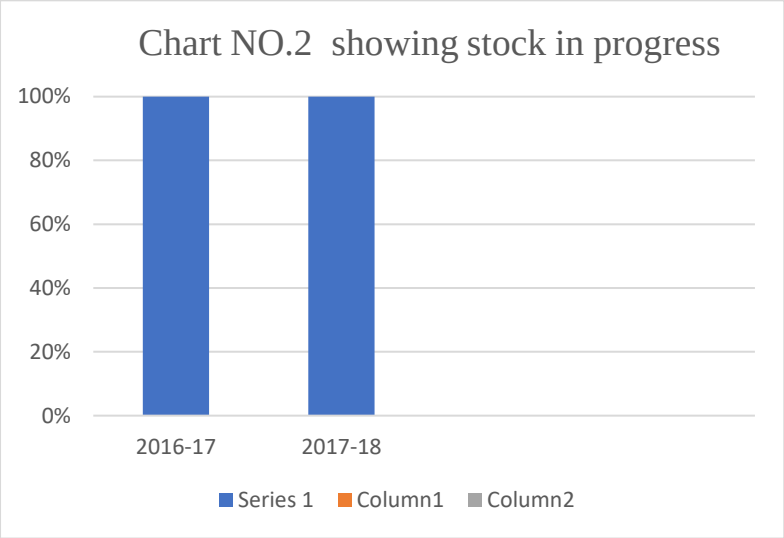
INTERPRETATION:

The figure above shows the raw material cost. In 2016, material costs increased by 582.11Rs and in 2017 It increased to 1858.17.

Stock in process (at closing stock): -

Table no:2 Table showing stock in progress

YEAR	AMOUNT OF STOCK in PROCESS
2016-17	122.82
2017-18	110.96



INTERPRETATION:

The above graph shows the stock in progress. In 2016 the cost of material is 122.82 Rs improved in this year and in 2017 it is decreased to Rs 110.96.

ECONOMIC ORDER QUANTITY:

EOQ for the year 2015-2016

The firm orders fibre optic cables. The following is the information for the operations during the year 2015-2016.

Table no:3 Table showing EOQ during 2015-16

PARTICULARS	
Fibre optic cables	123596Qty (Mt)
Ordering cost per order	2000
Carrying cost	10%
Purchase per unit	Rs 420

Calculation of EOQ: Total units required (A)= 123596mt

The ordering cost per order(O) = Rs.2000

Carrying cost per unit (C) = 10%

(i.e.) 10% of Rs.2000 =Rs.42

EOQ= $\sqrt{2AO/C}$

=2*123596*2000/42

= Rs.3430.896

Number of orders for the year= A/EOQ

= 123596/3430.896

= 36.02orders

Total annual cost = carrying cost + ordering cost

= 5893503+ 70000

= Rs.596950

Carrying cost = Order size * average inventory

- Order size = A/no of orders

= 123596/36

= 3433.22

• average inventory = order size/2

= 3433.22/2

= Rs.1716.61

• Carrying cost = 3433.22*1716.61

= Rs.5893503

• ordering cost = cost per order * no of orders

= 2000 *35

= Rs.70000

EOQ for the year 2016-2017

The firm orders fibre optic cables. The following is the information for the operations during the year 2015-2016.

Table no:4 Table showing EOQ during 2016-17

PARTICULARS	
fibre optic cable	106,066, Qty (Mt)
Ordering cost per order	Rs 2200
Carrying cost	10%
Purchase price per unit	Rs 440

Calculation of EOQ: Total units required (A)=106066mt

The ordering cost per order(O) = Rs.2200

Carrying cost per unit (C) = 10%

(i.e.) 10% of Rs.2200 =Rs.44

EOQ =√2AO/C

=2*106066*2200/44

=Rs.3256.77

Number of orders for the year = A/EOQ

=106066/3256.77

=32.56~33orders

Total annual cost= carrying cost + ordering cost

= 5165285+ 72600

= Rs.5569954

Carrying cost = order size * Average inventory

- Order size= A/no of orders

=106066/33

=3214.12

- Average inventory= Order size/2

= 3214.12/2

= Rs.1607.06

- Carrying cost = 3214.12*1607.06

= Rs.5165285

- Ordering cost = cost per order * no of orders

= 2200*33

= Rs.72600

VED ANALYSIS

Vital Essential and Desirable analyses are primarily used to manage spare parts in view of their importance to production.

Important spare parts leave inventory. Even for a short period, production will break for a considerable period of time. Essential spare parts are parts that cannot withstand a few hours a day. Essential spare parts are necessary, but if left unused for a week, it will lead to discontinued production**.**

MATERIAL	CLASS	VALUE	PRIORITY	MATERIAL
10%	"A"	70%	V 10% E 20% D 70%	70% 10% 10%
20%	"B"	20%	V 10% E 20% D 70%	70% 20% 10%
70%	"C"	10%	V 10% E 20% D 70%	70% 20% 10%

THE RE-ORDER LEVEL

The reorder level is the inventory level at which new orders for these items must be made in order to procure fresh items. The reorder level is dependent.

1. Time between order, placement and delivery receipt.

2. Usage rate of items. Inventories are constantly exhausting. Inventory utilization. The rate at which inventory is exhausted is termed as utilization.

The reorder level can be determined as follows: R = M + TU R = Reorder level M = Minimum level of inventory, T = Time interval / Delivery time, U = Percentage of usage Reorder levels and inventory patterns are displayed as follows:

This figure shows that if the usage is constant, the order is made at regular intervals, with the same amount each time, and the inventory goes to zero just before the order is received.

Safety stock:

Safety stocks complement the shortcomings of the increased demand for unexpected stocks as safety stocks increase. There is always uncertainty about time-lapse usage or other factors, so you can check the level of security at the inventory level. In general, the lower the level of safety, the greater the risk of inventory settlement. If the inventory level is predictable, there is a possibility of out of stock. However, inventory inflows and outflows provide additional security to prevent unintended inventory shortages in unpredictable or unforeseen events, thus predicting utilization when costs are low and safety stocks are not required.

- **RATIO ANALYSIS**

INVENTORY TURNOVER RATIO

What it is

This ratio often translates into a company's inventory during the year. Inventories are the least liquid assets, so a higher turnover rate is generally positive. On the other hand, a higher percentage than the industry average in general can mean that a business can lose revenue because of improper inventories.

When to use?

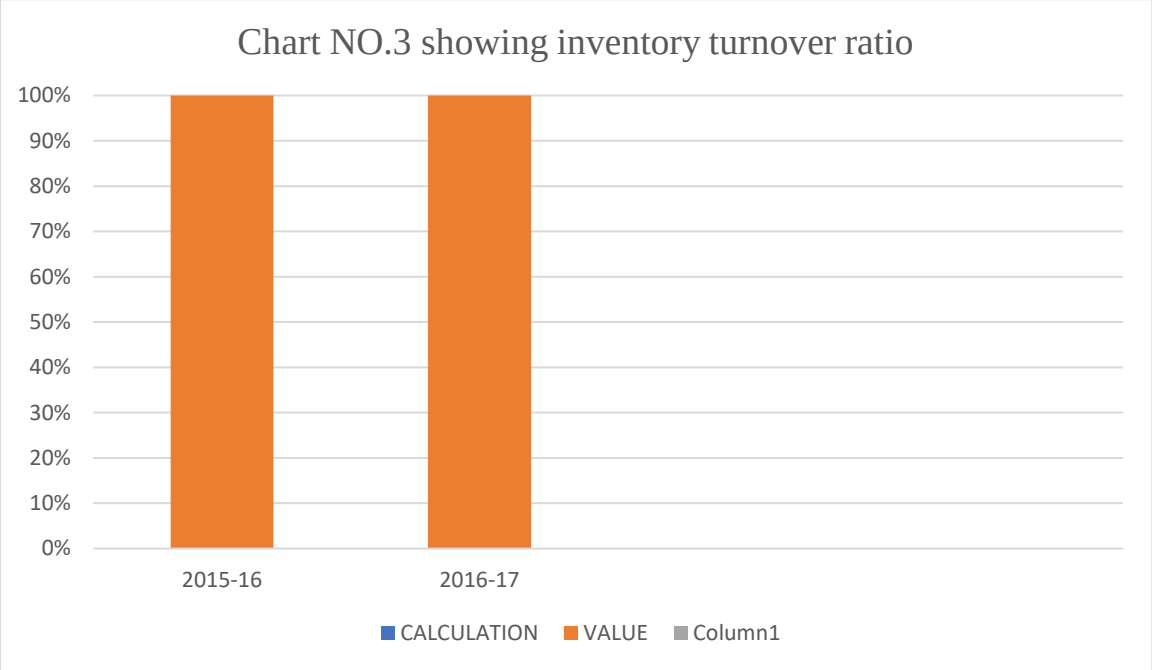
It is important to plan your sales plan successfully if your company's business is tied to inventory assets. A too slow transition to inventory may indicate that the company may have a negative cash flow. This ratio is carried out once a year because the judge's annual inventory changes.

- **INVENTORY TURNOVER RATIO**

Inventory Turnover Ratio = Net sales/Inventory

TABLE NO:5 Table showing data of inventory ratio.

YEAR	CALCULATION	VALUE
2015-16	6062340/904994	6.3480
2016-17	10345792/954994	10.8333



INTERPRETATION:

Inventory turnover rate is the percentage of efficiency that shows how well inventory is managed by comparing the average inventory with the cost of the products sold over a period of time.

- **CURRENT RATIO**

The current interest rate is the liquidity ratio that predicts the organization's ability to pay.

Temporary commitments or commitments expire within one year. Help investors and analysts.

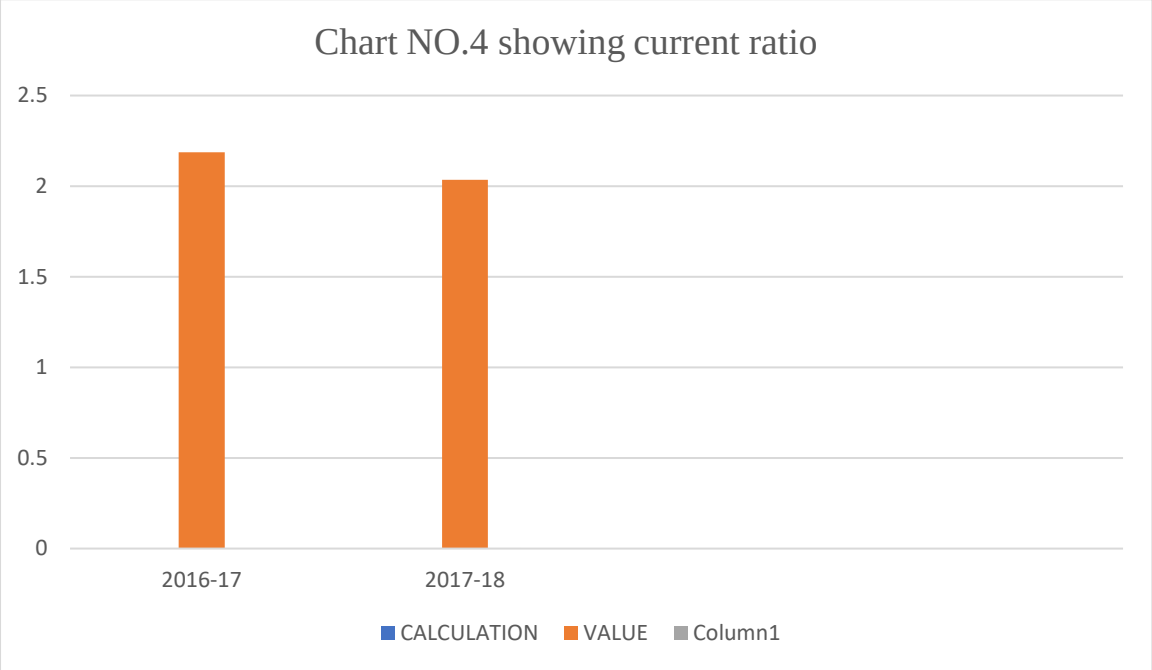
How organizations can make the most of existing resources in their accounting careers to

Fulfil current debt and other debts.

Current Ratio = Current Assets/Current liabilities

Table No:6 Table Showing data of current ratio

YEAR	CALCULATION	VALUE
2016-17	3105869/1419932	2.1:1
2017-18	3770614/1853385	2.0:1



INTERPRETATION:

The chart above shows that the current exchange rate for 2016-17 is 2.1873. The ratio of the current year to the previous year has decreased due to the increase in current liabilities. The current interest rate is higher than the standard ratio of 2:1, so there are enough pixel asset management assets to make up for the current debt.

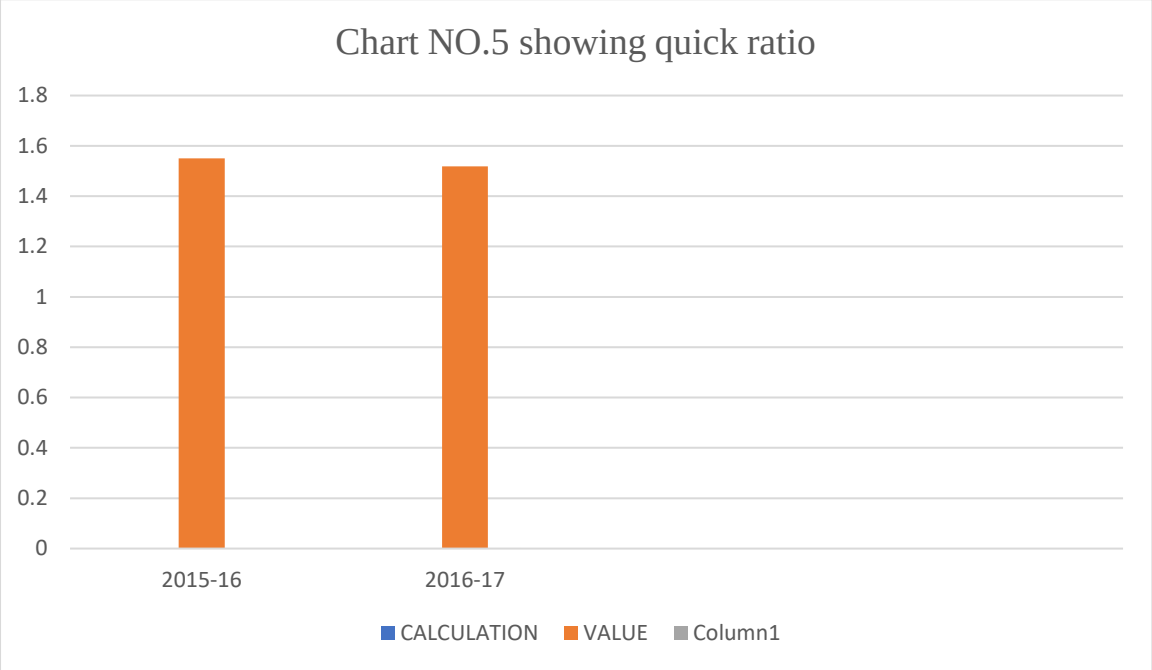
- **QUICK RATIO**:

The fast rate is the ratio of how well an organization can finance its financial debt in the short term. The fast rate is also known as the Acid - test ratio.

$$\frac{\text{QUICK RATIO (CURRENT ASSETS – INVENTORY)}}{\text{CURRENT LIABILITIES}}$$

TABLE NO:7 table showing data of Quick ratio

YEAR	CALCULATION	VALUE
2015-16	3105869-904994/1419932	1.5:1
2016-17	3770614-954994/1853385	1.5:1



INTERPRETATION:

The Quick ratio for 2015-16 was 1.5499, and in 2016-17 the fastest rate 1.5191 stipulates that the company's liquidity position is inappropriate.

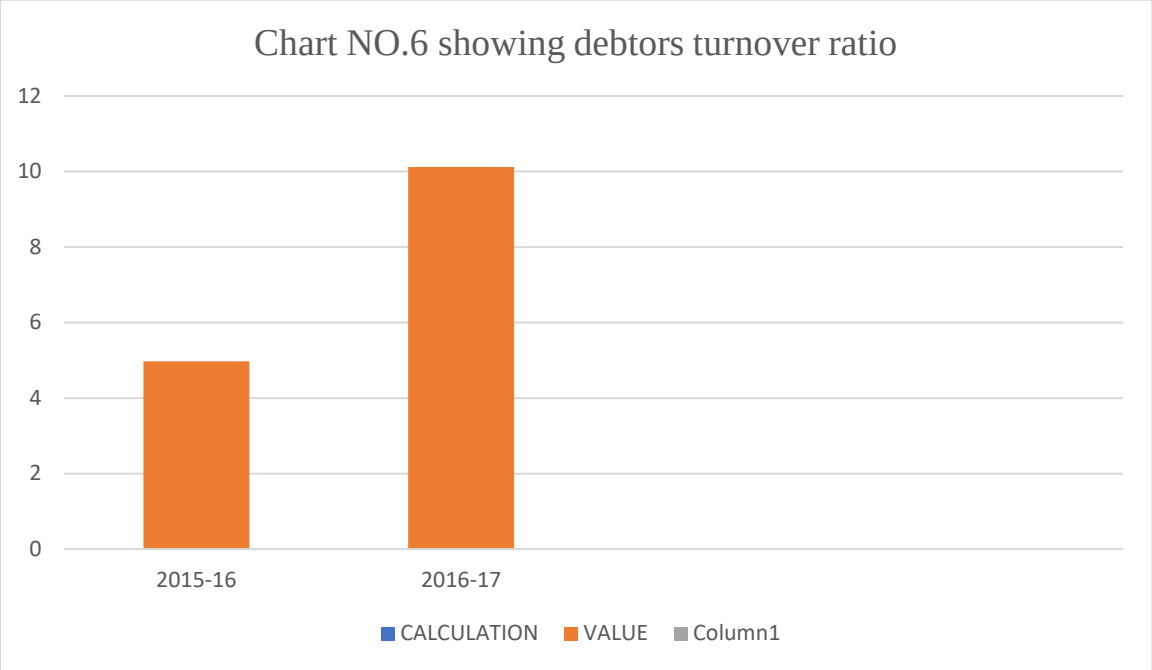
➢ DEBTOR TURNOVER RATIO

The Debtor turnover ratio is moreover called as receivables turnover ratio show how quickly the credit deals are changed over into the money. This ratio gauges the profitability of association in overseeing and assembling the credit issued to the customers.

Debtor turnover ratio = Net credit sales/Average accounts receivable

TABLE NO:8 Table showing data of debtor's turnover ratio

YEAR	CALCULATION	VALUE
2015-16	6062340/ 1219218	4.9723
2016-17	10345792/ 1021934	10.1237



INTERPRETATION:

Obviously, debtor turnover ratio fluctuating throughout the years. It was multiple times on the year 2016-17 which demonstrates that organization isn't gathering obligation quickly

➢ CREDITORS TURNOVER RATIO:

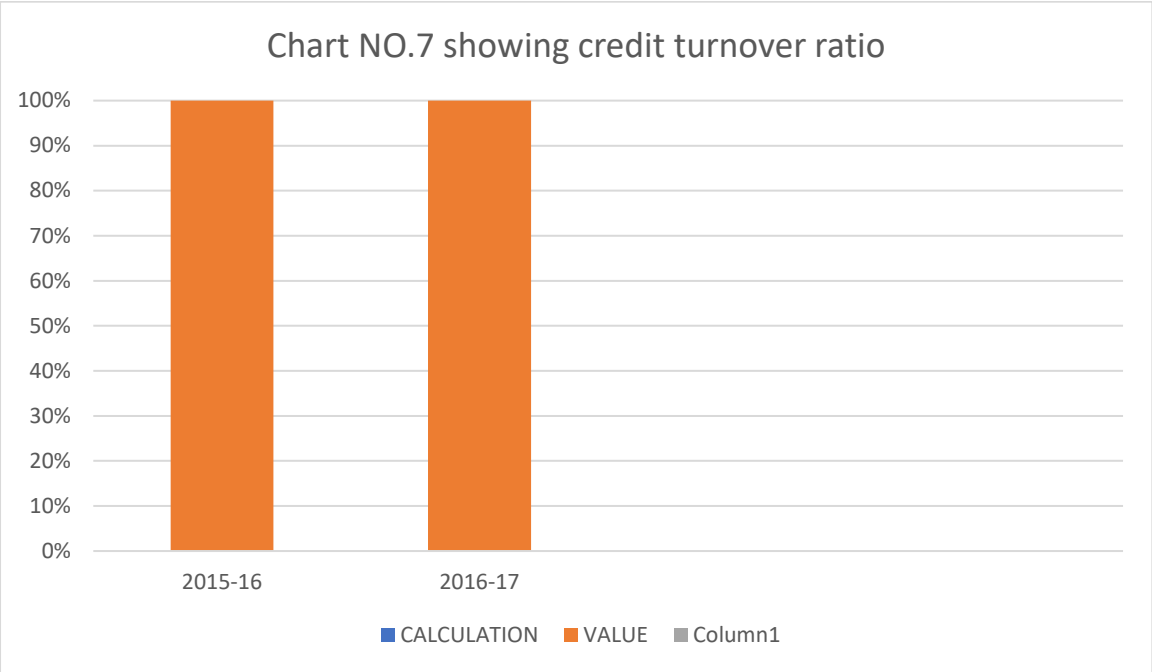
The creditor turnover ratio is a momentary liquidity measure used to assess the rate at which an association fulfils its providers. Creditor turnover ratio shows how oftentimes an association fulfils its record payable amid a period.

Creditors turnover ratio = Net purchases (net purchases - purchases-returns)

Average creditors

TABLE NO: 9 Table showing data of creditors turnover ratio

YEAR	CALCULATION	VALUE
2015-16	5055800/782921	6.4576
2016-17	8759162/588777	14.8768



INTERPRETATION:

creditor turnover ratio changes each year. It was 6.4576 in the year 2015-16 what's more, increments in the year 2016-17 to 14.8768. it demonstrates that the organization is making brief making to the creditors.

CHAPTER- 5

FINDINGS AND SUGGESTIONS, CONCLUSION, BIBLOGRAPHY

5.1 SUMMARY OF FINDINGS

- During the study period, the company's products were sold well.
- Inventory turnover during the study period showed declining year by year. This shows that managing inventory to sales is inefficient.
- Pixel control provides high current and speed ratios of 1.5: 1 and 1.5: 1 at 2015-16 and 2016-17, respectively.
- Debt The debt turnover rate in 2016-17 is particularly high compared to 2015-16.
- The turnover rate of creditors increased in the long-term extension of 2015-16 and 2016-17. This shows that the company is quickly making it to creditors.

5.2 SUGGESTIONS

- The company must use advanced technology to manage inventories in a better way.
- The calculated EOQ indicates that inventory requirements should be obtained through frequent orders with suppliers, not one-off replenishments.
- The company must take steps to maintain adequate warehouses and spare parts to avoid frequent machine failures.
- There is a lack of communication between departments such as marketing, planning, procurement, production and distribution department so company need to maintain the good relationship and proper communication between the department.
- Businesses must follow real-time technology to eliminate waiting time for materials.
- You need to improve your company infrastructure.

5.3 CONCLUSION

Inventory management is related to the precise record were the final finished goods are made that ready for shipping. That means the newly completed products which are posted as total inventory and the closest finished product shipment is subtracted from the buyer. When a company develops a return policy, the finished goods inventory typically includes subcategories that are used to calculate reclassified returns or secondary quality. By keeping the number of finished product inventories accurate, you can quickly deliver information about your ready-to-ship ready-to-use products to your salespeople at right time.

Inventory management is critical to reduce cost, while consulting regulatory requirements. Demand and supply are delicate balances, and inventory management wants to stay out of balance. With well-trained inventory management and high-quality software, you can successfully perform inventory management.

5.4 BIBLIOGRAPHY

Referred following standard text and websites:

Financial Management ……. I.M. Pandey

Financial Management ……. Prasanna Chandra

Financial Management ……. Van Horn

Management Accounting and Control ……. S.N. Maheshwari

Financial Management ……. Khan and Jain

Website:

WWW.pixelconteols.com

WWW.FINANCIAL MANAGEMENT.COM

WWW.PRICIPALS OF ACCOUNTING.COM

- AHMAD KAMILAH & SHAFIE MOHAMEDZABRI. (2016). Inventory Management Practices among Malaysian Micro Retailing Enterprise. Journal of business and retail management research. 11 (1). p. 97 -106.

- AIJUAN ZOU. (2012). Optimization Research of Construction Inventory Management on Site Based on Inventory Theory Applied Mechanics and Material. 29(11). p. 1321-1325.

- ANONYMOUS. (1992). Good Inventory Management Crucial in Recessionary Times. Building Strategies for Business Owners. 22(4). p. 6.

- ANONYMOUS. (2001). Overview on Inventory Management. Annual Survey of Inventory Management. 1(3). 3-6.

- BALLOU & RONALD. H. (2000). Evaluating Inventory Management Performance Using Turnover Curve. International Journal of Physical Distribution and Logistics Management. 30(1) 72-85.

- BENNETT & SOLON. A. (1985). Reduce Costs with Material Management. Management Quarterly. 26(2). p. 46.

- BESTA. P, JANOVSKA. K & LAMPA. M. (2012). Logistics and Inventory Management

- BIGGART & TIMOTHY. B. (2002). Impact of JIT on Inventory to Sales Ratios. Industrial Management and Data System. 102 (3). 197- 202.

- CAPKUM, VEDRAN & LAWRENCE (2009). On the Relationship between Inventory and Financial Performance in Manufacturing Companies. International Journal of Operation and Production Management. 29(8). 789-806.

- COX & JAMES. F. (1986). Inventory Management for Hospital Pharmacies. Hospital Material Management. 8(1). p. 64.

- DENTON & KEITH. (1994). Top Management's Role in Inventory Control. Industrial Engineering. 26

- DUBELAAR & CHRIS. (2001). Relationships between inventory, sales and service in a retail chain store operation. International Journal of Physical Distribution & Logistics Management. 32(2). p. 96-108.

- FIORA, CHRISTOPHER. R & PITZER. (1986). An Inventory Management Tool for a Basic Industry. Production and Inventory Management. 27(1). p. 108.

- GOONATILAKE & LALITH. (1990). Inventory Management in the Manufacturing Sector in Developing Countries. Engineering Costs and Production Economics. 19(1). p. 19.

- HADLEY & SCOTT. W. (2004). Safety Inventory Analysis. Strategic Finance. 86(3). p. 26-33.

- HSIEH & BRAIN. H. (1992). New Development in Inventory and Materials Management.

- Logistics Information Management. 5(2). p. 32.

- KONTUS & ELEONORA. (2014). Management of Inventory in a Company. Economics Journal. 27(2). p. 245-256.

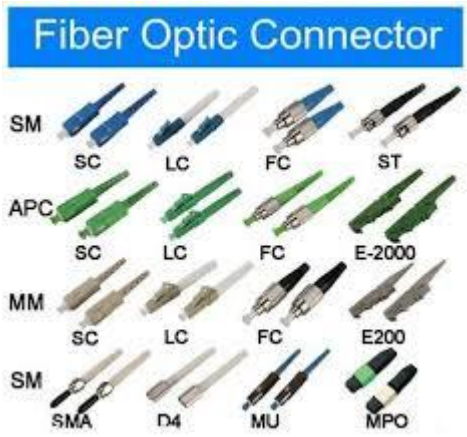
- LAMBERT & DOUGLAS. M. (1982). Inventory Carrying Costs: Current Availability and Uses. International Journal of Physical Distribution and Material Management. 12(3). p. 56.

- MILLSTEIN, MITCHELL. A & HAITAO. (2014). Optimizing ABC Inventory Grouping Decisions. International Journal of Production Economics. 14(8). p. 71.

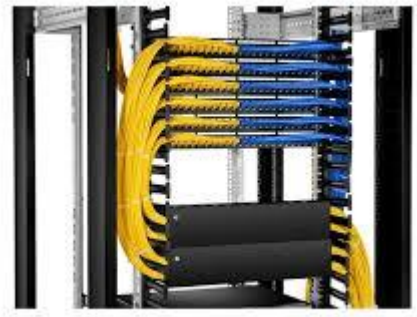
ANNEXURE

PRODUCTS

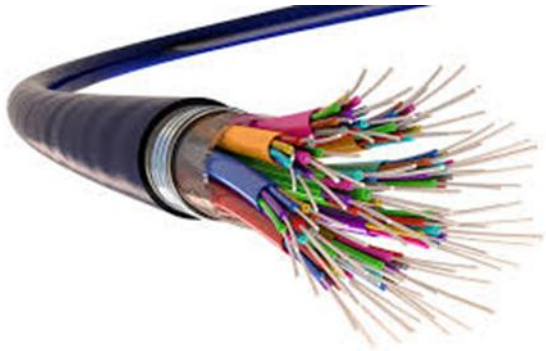
- Fibre Optic Connector



- Patch Panels / LIU

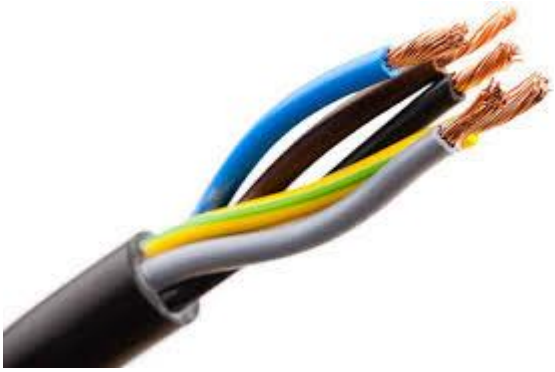


- Fiber Optic Cable



- Media Convertors

- Communication Cables



- Ethernet Switches

- Ethernet Routers

FINANCIAL STATEMENTS

PROFIT & LOSS ACCOUNT DURING THE YEAR ENDED MARCH 31,2016

Particulars	Amount	Particulars	Amount
Opening Stock	63400	**Sales Accounts:**	
Purchase Accounts:		Sales	6062340
Purchase	3561066		
Purchase Imports	1494734	Closing Stock	904994
Product Assembly Charges	595141		
Gross Profit C/d	**1252993**		
	6967334		**6967334**
Salary & Wages	1793290	**Gross Profit B/d**	**1252993**
Travelling & Conveyance	1216680		
Guest House Charges	1182500	Interest on IT Refund FY	
Loading & Boarding	960057	2013-14	39820
Office Expenses	593931	Interest on IT Refund FY	
Fuel Expenses Reimbursement	546714	2014-15	19120
Import Duty Paid	332746	Freight Charges	16825
Vehicle Maintenance	269390	Service Income	7991701
Computer Maintenance	225788		
PF employee Contribution	215123		
PF & PPF Employer Contribution	215123		
Postage & Courier Charges	212732		
Employees State Insurance Corporation	120503		
Rent Paid	60000		
Repair & Maintenance Charges	40563		
Interest & Service Charges	34168		
Audit Fee	22000		
Admin Charges	18140		
Rate & Taxes	16816		
IDLI Charges	8998		

Bank Charges	6699		
Donation Paid	2000		
Round Off	19		
Depreciation	8516		
Net Profit Transfer to P&L adj Account	**1217965**		
	9320461		**9320461**

BALANCESHEET AS AT MARCH 31,2016

Liabilities	**Sch No**	**Amount**	**Assets**	**Sch No**	**Amount**
Partner's Capital Account	1		Fixed Assets	4	50319
Shankar Murthy N		500000	Advances and Deposits	5	862567
Venkataramana Reddy		600000			
			Sundry Debtors	6	1219218
Partner's Current Account			Cash & Bank Balance	7	119090
Shankar Murthy-Working Partner		458019	Closing Stock		904994
Venkatraman Reddy		178235			
Current Liabilities & Provisions	2	637011			
Sundry Creditors	3	782921			
		3156188			**3156188**

PROFIT & LOSS ACCOUNT DURING THE YEAR ENDED MARCH 31,2017

Particulars	**Amount**	**Particular**	**AMOUNT**
Opening Stock	904994	**Sales Accounts:**	
Purchase Accounts:		Sales	10345792
Purchase	7,305,172		
Purchase Imports	1,453,990	Closing Stock	954994
Gross Profit C/d	1,636,631		
	11300786		**11300786**
Salary & Wages	2418226	**Gross Profit B/d**	1636631
Travelling & Conveyance	2516157		
Guest House Charges	2011005	Interest on IT Refund	23544
Loading & Boarding	2272860	Freight income	34837
Office Expenses	831522	Service income	13,271,072
Fuel Expenses Reimbursement	803000		
Product assembly charges	675331		
ESIC Employer contribution	172938		
Vehicle Maintenance	405074		
Computer Maintenance	270000		
PF employee Contribution	290187		
Postage & Courier Charges	346105		
Rent Paid	180000		
Repair & Maintenance Charges	179228		
Interest & Service Charges			
Audit Fee	15550		
Admin Charges	30000		
Electricity charges	30954		
Freight charges	18880		
EDLI Charges	74294		
Bank Charges	12140		
PT(VAT)	15298		
Input SBC @0.5%	4000		
Round Off	232		

Depreciation	26 43587		
Net Profit Transfer to P&L adj Account	1349490		
TOTAL	**14966084**		**14966084**

BALANCESHEET AS AT MARCH 31,2017

Liabilities	**Sch No**	**Amount**	**Assets**	**Sch No**	**Amount**
Partner's Capital Account	1		Fixed Assets	4	198942
Shankar Murthy N		500000	Advances and Deposits	5	1574633
Venkataramana Reddy		600000			
			Sundry Debtors	6	1021934
Partner's Current Account			Cash & Bank Balance	7	219053
Shankar Murthy		471352			
Venkataramana Reddy		544819	Closing Stock		954994
Current Liabilities & Provisions	2	1264608			
Sundry Creditors	3	588777			
TOTAL		**3969556**	**TOTAL**		**3969556**

ACHARYA INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MBA

PROJECT(17MBAPR407) -WEEKLY REPORT

NAME OF THE STUDENT: Renuka y

INTERNAL GUIDE: Prof. Sandhya s

USN: 1AY17MBA42

COMPANY NAME:PIXEL CONTROLS, Bengaluru

WEEK	WORK UNDERTAKEN	EXTERNAL GUIDE SIGNATURE	INTERNAL GUIDE SIGNATURE
3rd Jan 2019 – 9th Jan 2019	Industry Profile and Company Profile		
10th Jan 2019 – 17th Jan 2019	Preparation of Research instrument for data collection		
18th Jan 2019 – 25th Jan 2019	Data collection		
26th Jan 2019 – 2ndFeb 2019	Analysis and finalization of report		
3rd Feb 2019 – 9th Feb 2019	Findings and Suggestions		
10th Feb 2019 – 16th Feb 2019	Conclusion and Final Report		

PIXEL CONTROLS ★ BANGALORE ★

Company Seal

ACHARYA INSTITUTE OF TECHNOLOGY BANGALORE 560 107

College Seal

HOD Signature

Head of the Department
Department of MBA
Acharya Institute of Technology
Soldevanahlli, Bangalore-560 107