#### **TECH SAKSHAM**

#### **CASE STUDY REPORT**

## SUPPLY CHAIN ANALYSIS OF INVENTORIES

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# SUPPLY CHAIN ANALYSIS OF INVENTORIES

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### **INTRODUCTION**

Supply chain analysis is all about understanding and optimizing the flow of goods and services from the supplier to the customer.

It involves analyzing various factors like inventory management, transportation, and logistics

To identify areas for improvement and cost savings

Inventory analysis is one of the branches of Operation Research which deals in studying

understanding the stock/product mix combined with the knowledge of the demand for stock/product.

It is the technique to determine the optimum level of inventory for a firm

Applied chain management is a process of managing supply relationships outside a company and the flow of stock into and through a company.

Inventory management may focus on trends and orders for the company or a part of the company. Inventory management is essential for properly

running the supply chain.



#### **SERVIES AND TOOLS REQUIRED**

**Strategic Supply Chain Management Tools** 

Strategic planning and analysis are the main focus of strategic supply chain management tools.

They include simulation software solutions, integrated planning systems, advanced planning systems, business intelligence (BI) tools, and optimization software

2. Transportation Management Systems (TMS)Transportation Management Systems are critical for optimizing the movement of goods across the supply chain.

These tools assist in route planning, carrier selection, freight auditing, and tracking shipments, ensuring timely and cost-effective delivery...

3. A supply chain management tool is any device, concept, or system that is used to help oversee, control, and improve the flow of goods and services through the supply chain. In practice, it almost always refers to software applications that serve certain key functions: Order processing and tracking tools.



### PROJECT ARCHITECTECTURE

To design a supply chain system architecture, it must include 4 aspects: information flows, physical flows, financial flows, and supply chain architecture (organization design=labor, process units, vehicle, and cost structure). The information flow determines the entire supply chain

An architectural diagram is a visual representation that maps out the physical implementation for components of a software system. It shows the general structure of the software system and the associations, limitations, and boundaries



between

each ell

### **MODELING AND RESULT**

Supply chain modeling is a process used to plan and optimize supply chain routes. Companies use supply chain modeling to develop strategies for getting products, supplies, or resources from one place and state to another. A supply chain can be extremely complex.

By managing the supply chain, companies can cut excess costs and deliver products to the consumer faster and more efficiently. Good supply

chain management can help prevent expensive product recalls and lawsuits as well as bad publicity.

inventory management follows the flow of goods to, through and out of the warehouse. The supply chain includes demand planning, procurement, production, quality, fulfillment, warehousing and customer service—all of which require inventory visibility.



6 Major Types of Supply Chain Models

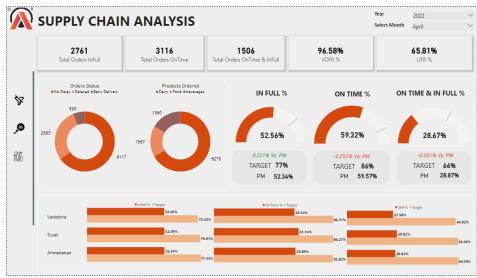
- Continuous Flow Model.
- The Fast Chain Model.
- The Efficient Chain Model.
- The Agile Model.
- The Custom-configured Model.
- The Flexible Model.

### **CONCLUSION**

In conclusion, inventory management is a critical process for any business to help ensure that it has the right amount of inventory at the right time. It involves forecasting, ordering, receiving, storing, and tracking inventory levels and can have a major impact on the success or failure of a business.

By analyzing customer data, supply chain analytics can help a business better predict future demand. It helps an organization decide what products can be minimized when they become less profitable or

#### understand what customer needs will be after the



initial order.

The inventory valuation method directly impacts your profit margin and accounting principles. So choosing the right valuation method is complex but it will make a big difference to your business. Analyse all the methods, but most businesses choose the FIFO method as it is more profitable.



In conclusion, blockchain has the potential to revolutionize the way businesses manage their supply chains. By providing greater transparency, faster and more efficient processes, and reduced costs,

blockchain can address some of the biggest



### **FEATURE**

The components of a supply chain include producers, vendors, warehouses, transportation companies, distribution centers, and retailers.

The functions of a supply chain include product development, marketing, operations, distribution, finance, and customer service.

Today, many supply chains are global in scale.

### **FUTURE SCOPE**



The supply chain of the future will use artificial intelligence and other digital technology to automate execution.

Not only does this connect decision making across the value chain,

It also gives employees more flexibility with work design.

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It also gives employees more flexibility with work design.

Supply chain analytics can identify known risks and help to predict future risks by spotting patterns and trends throughout the supply chain.

By analyzing customer data, supply chain analytics can help a business better predict future demand.

### **REFERENCES**

References numbers are used to identify and track various items in Inventory, such as inventory adjustments, location transfers, and manual counts.

### **LINK IN DEVICE**