

THE CONCEPTS AND STRATEGIES OF INVENTORY MANAGEMENT IN FMCG'S

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Abstract :

Inventory management is an important aspect of corporate operations. It entails successfully managing the flow of commodities in order to meet client demand while minimising holding costs.. Demand forecasting, inventory optimization, and keeping safety stock are all important goals. The economic order quantity (EOQ) model assists in determining the optimal order quantity, whereas just-in-time (JIT) principles seek to synchronize production with demand.

ABC analysis ranks issues in order of significance, and technology and vendor management are critical. Fill rate and inventory turnover are critical performance criteria for determining efficacy. To summarise, effective inventory management requires striking a balance between customer happiness and cost effectiveness.

This study is has been used descriptive research. The information collected from different research articles and have been cited where they it required. Mainly focused on MNC inventory management.

Key words: Inventory management, MNC,FMCG,TATA,ITC,HUL P&G, Descriptive Research.

INTRODUCTION:

Inventory management is a critical component of effective corporate operations, comprising the methods and practices used to supervise and regulate a company's inventory. Inventory is a critical asset that must be carefully managed, whether it is in a manufacturing facility with raw materials and completed products or a retail store with consumer items.

The basic purpose of inventory management is to achieve a careful balance between ensuring that a company has enough items or resources on hand to fulfil consumer demand and limiting needless inventory building. This equilibrium is critical for optimizing resources, lowering costs, and increasing overall operating efficiency.

Inventory management entails a variety of critical responsibilities, such as estimating demand and selecting ideal inventory levels, as well as regulating holding.

Traditional approaches in decision making based on manager instincts and hunches are no longer enough in the today's increasingly competitive environment. Small to medium sized family owned textile businesses are usually prone to this way of thinking. This paper discusses some basic concepts and techniques for classifying inventory, controlling inventory levels, avoiding stock outs and increasing customer satisfaction.(Priniotakis& Argyropoulos, 2018)

❖ Depending on the organisational objectives, inventories in warehouses may be needed to fulfil customer or humanitarian demands. Controlling inventory is critical to operational success and organisational performance.(Munyaka Baraka & Yadavalli, 2022)

❖ It is shown how to compute a reorder point and how to calculate service levels and probabilistic inventory models. (Ivanov et al., 2017).

❖ It is comprised of series of processes, which provide an assessment of the organization's inventory. Since the inventory turnover ratio shows the increasing trend, there will be more demand for the products in the future periods.(Lokhande & Lokhande, 2022).

❖ The topic points out the continuing gap between theory and practice, followed by a number of suggested research topics to help bridge the gap.(Silver, 2008)

❖ The task of inventory management is to find the quantity of inventories that will fulfil the demand, avoiding overstocks(Sheakh, 2018)

❖ Research in the field generally tends to treat the emerging approaches techniques in silos; few academic papers have attempted to undertake a holistic review of the several key emerging techniques available to today's practitioner.(Aro-Gordon & Gupte, 2016)

❖ The classical inventory management techniques were applied to an organisation's inventory system. A door sales company in Ilorin, Nigeria that volunteered information on the basis of anonymity was used and relevant data were collected on six types of doors; panel, flush, sliding, folding and as well as manual and electronic garage doors(Inegbedion et al., 2019)

❖ This study aims to develop an Inventory Management Systems (IMS) that can provide better control and handling of product stock, customer order, customer service and order delivery that relates to company inventory information.(Chin et al., 2023)

❖ Technology has also enabled customers to obtain vast amounts of information about a product, such as its physical attributes and availability. In today's increasingly competitive marketplace, consumers are constantly pressuring suppliers to simultaneously reduce costs and lead times and increase the quality of their products(Özer, 2011)

❖ The operation of inventory management determines the efficiency of storage of products. The progress in techniques and management principles improves the moving load, delivery speed, service quality, operation costs, the usage of facilities and energy saving.(J et al., 2017)

❖ Inventory management is considered to be the most important function in every manufacturing firms. Steel industries in India are facing top competition in determining appropriate level of inventory that should be maintained by firms towards meeting at customer needs as well as smooth production process.(Panigrahi et al., 2019)

TATA :The company "Tata" is an Indian global conglomerate. The Tata Group is one of India's largest and oldest corporate empires, with interests in automobiles, steel, information technology, telecommunications, and other industries. Jamsetji Tata started it in 1868, and it has since evolved to become a global brand with a presence in many nations.

The Tata Group includes well-known companies and subsidiaries such as Tata Motors (known for manufacturing Tata cars and trucks), Tata Steel, Tata Consultancy Services (TCS, a major IT services company), Tata Power, Tata Communications, and Tata Sons (the Tata Group's holding company).

Tata is well-known for its corporate social responsibility and humanitarian efforts. The Tata Trusts, which were founded by the Tata family, have made major contributions to education, healthcare, and other humanitarian causes in India.

FMCG's of TATA :

Tata Consumer Products Limited (previously Tata Global Beverages Limited) is a Tata Group company that engages in the Fast-Moving Consumer Goods (FMCG) industry. Tata Consumer Products Limited is primarily concerned in beverages, food, and other consumer goods. It is vital to note that the FMCG business is very dynamic, and companies' product portfolios may alter or expand over time.

Tata consumer products limited is involved with the following -known brands and products:

Tata tea: tata tea is a major tea brand in india, offering a wide range of tea products such as black tea, green tea and speciality teas.

Tetley:tetley is a well-known tea brand that offers a diverse selection of tea blends and products.

Tata coffee: tata coffee manufactures and markets coffee goods such as roasted and ground coffee.

Tata salt: tata salt is a well-known iodized salt brand in india.

Tata sampann: this brand sells a variety of culinary items such as pulses, spices, and ready-to-cook mixes.

THE PROCESS OF INVENTORY MANAGEMENT IN TATA'S FMCG :

To maintain effective stock control and product availability, the inventory management process of Tata Group's Fast-Moving Consumer Goods (FMCG) business, such as Tata Consumer Products Limited (previously Tata Global Beverages Limited), normally follows a structured approach. While individual practises may differ, the following is an outline of the inventory management process:

1. **Demand Prediction:** Due to frequently changing customer tastes and limited product shelf life, accurate demand forecasting is critical in the FMCG business. Tata FMCG firms estimate demand for their goods using historical data, market research, and predictive analytics.
2. **Inventory Planning:** Inventory planners establish the ideal inventory levels for each product SKU (Stock Keeping Unit) based on demand projections. Setting minimum and maximum stock levels, reorder points, and safety stock levels to accommodate for demand and supply uncertainties.
3. **Supplier Collaboration:** FMCG firms, such as Tata, collaborate closely with their suppliers to ensure a consistent supply of raw materials, packaging materials, and final goods. Setting lead times, quality standards, and delivery dates are all part of this relationship.
4. **Procurement:** Tata FMCG firms purchase raw ingredients and packaging materials from vendors depending on inventory levels that have been planned. To avoid manufacturing delays, purchase orders must be placed and delivery must be made on schedule.
5. **Warehousing:** FMCG items are kept in warehouses that are strategically positioned to meet distribution demands. Warehouses are maintained to guarantee adequate storage conditions, stock rotation to keep products from expiring, and accurate record-keeping.
6. **Distribution:** To reach retailers, distributors, and customers, Tata FMCG firms have substantial distribution networks. Distribution centres play an important role in inventory management, on-time delivery, and product freshness.
7. **Inventory monitoring:** Advanced inventory monitoring systems, such as barcoding and RFID technology, are frequently utilised to track stock levels in real time. This enables for the rapid detection of supply shortfalls or surpluses.
8. **Inventory Replenishment:** Purchase orders are issued automatically or manually to restock stock when inventory levels approach predefined reorder thresholds. This guarantees that items are always accessible to suit the needs of customers.
9. **Inventory Control:** Physical inventory levels are verified against records through regular audits and cycle counts. Any inconsistencies are addressed and fixed as soon as possible.

10. **Expiry Management:** Managing product expiry dates is critical in the FMCG business to avoid waste. To ensure that older items are sold before newer ones, FIFO (First-In, First-Out) or FEFO (First-Expired, First-Out) systems are frequently used.

11. **Inventory Optimisation:** Efforts are made on a continuous basis to optimise inventory levels and decrease holding costs while assuring product availability. This may entail analyzing and fine-tuning inventory parameters using computerized tools.

12. **Quality Control:** To guarantee that goods fulfil the needed quality and safety requirements, stringent quality control techniques are used. Items that are not compliant are removed from inventory.

13. **Demand Monitoring:** Tata FMCG firms actively monitor real sales and market trends in order to make necessary inventory modifications. Responding to seasonal demand changes and market promotions are examples of this.

Inventory management is crucial in the FMCG industry, including Tata FMCG enterprises, for satisfying consumer demand, minimizing waste, and maximizing profitability. To keep the proper quantity of inventory at all times, a mix of precise forecasting, effective supply chain management, and technology-driven solutions is required.

AUTOMOBILES of TATA :

Tata Motors is a major participant in the automobile sector and a subsidiary of the Tata Group, India's largest conglomerate. Tata Motors is well-known for producing a diverse range of vehicles such as passenger automobiles, commercial vehicles, and electric vehicles.

Tata Motors produces and sells a variety of passenger vehicles and SUVs under several brand names. The Tata Tiago, Tata Tigor, Tata Altroz, Tata Nexon, and Tata Harrier are some of its well-known models. To compete in the highly competitive Indian and worldwide markets, Tata Motors has been trying to improve the design, technology, and safety aspects of its passenger vehicles.

Commercial Vehicles: Tata Motors is a key participant in the commercial vehicle industry. It manufactures a wide range of commercial vehicles, including trucks, buses, and construction equipment. Tata Motors' commercial vehicles are utilised for both local and international transportation.

Electric Vehicles (EVs): Tata Motors has made significant inroads into the electric car sector. It has launched electric versions of some of its existing models, such the Tata Nexon EV, and is seeking to extend its electric vehicle line.

Global Presence: Tata Motors exports its automobiles to several nations and has a global presence. To increase its reach and improve its product offerings, it has also formed alliances and partnerships with foreign automakers

Technology and innovation: To advance car technology, safety features, and fuel efficiency, Tata Motors has been spending money on research and development. Additionally, networked vehicles and automated driving technology are being studied.

THE PROCESS OF INVENTORY MANAGEMENT IN TATA'S AUTOMOBILES :

One of India's top automakers, Tata Motors, has a multi-stage manufacturing process that includes everything from design and research through production and distribution.

An summary of the normal procedure is given below:

1. Product Design and Development:

-Conceptualization: The creation of a new vehicle is the first step in the process. The initial car design is created by Tata Motors design teams while taking market trends and consumer preferences into account.

- Engineering: To create comprehensive blueprints, prototypes, and specifications for the vehicle, engineers and designers collaborate. Creating the chassis, body, engine, and other parts falls under this category.

2.Supplier management: To get the numerous parts and materials needed for the production of vehicles, Tata Motors works with a network of suppliers. These vendors offer anything from basic supplies to unique car parts.

3.Production Planning: Production planning include establishing production quantities, scheduling the manufacturing process, and allocating resources including labour, equipment, and materials.

- To maximise manufacturing productivity and cut down on lead times, Tata Motors employs tools and software for production planning.

4. Production:

- Body Shop: The vehicle's structure and body are put together at the body shop using specialized tools and welding techniques.

- Paint Shop: The vehicle proceeds through the paint shop for surface preparation and painting after the body assembl.

- Assembly Line: The car is subsequently transported to the assembly line, where a number of parts are fitted, including the electronics, interior, and the engines and transmissions.

- Quality Control: To guarantee that the vehicle fulfils quality and safety requirements, quality control inspections are carried out at various phases of manufacture.

5. Validation and Testing:

To make sure the vehicle complies with safety, emissions, and performance regulations, Tata Motors goes through a thorough testing and validation procedure. This includes testing for crashes, pollutants, and endurance.

6. Distribution: - Following production and testing, the cars are delivered to distributors and dealerships via a well-coordinated logistics and distribution network. As part of its distribution plan, Tata Motors may possibly export automobiles to other markets.

7. Sales and Marketing: To advertise and sell its automobiles to consumers, Tata Motors uses sales and marketing teams. This covers marketing, advertising, and sales initiatives.

8. Post-Sale Support: To maintain customer pleasure and the long-term dependability of their cars, Tata Motors offers after-sales services, including maintenance, repairs, and replacement components.

9. Customer assistance and comments: Tata Motors cherishes consumer input and consistently seeks to improve its products based on market trends and customer feedback.

10. Development and research: In order to innovate and advance vehicle designs, technology, and environmental sustainability, Tata Motors continually invests in research and development.

11. Environmental Compliance: Tata Motors complies with all applicable laws, rules, and guidelines while continuously seeking to lessen the environmental effect of its products and production methods.

12. Quality Control: To ensure high levels of quality, strict quality assurance procedures are used throughout the production process.

Depending on the kind of vehicle being produced (such as passenger automobiles, commercial vehicles, or electric vehicles), as well as technological improvements in the manufacturing industry, Tata Motors' exact procedures and features may change. This summary gives a broad grasp of Tata Motors' method for making cars.

THE DIFFERENCES BETWEEN FMCG AND AUTOMOBILES INVENTORY :

ASPECT OF INVENTORY MANAGEMENT	FMCG (TATA CONSUMER PRODUCTS LIMITED)	AUTOMOTIVE (TATA MOTORS)
Inventory turnover	High turnover due to short shelf life	Moderate turnover based on production schedules
Demand fluctuation	Rapid and unpredictable	Influenced by seasonality and market trends
Distribution network	Extensive network to reach retailers	Focused on production and distribution centers
Demand Forecasting	Critical for preventing stockouts	Important for managing production schedules
Just-In-Time (JIT) Delivery	Emphasis on JIT to reduce holding costs	Components ordered based on production plans
Product Complexity	Relatively simple (e.g., beverages)	Complex due to various parts and components
Supplier Relationships	Focus on supplier collaboration	Extensive supplier network for parts
Seasonal Variations	Demand may vary seasonally	Affected by seasonality and market trends
Spare Parts Inventory	Not applicable	Critical for after-sales service and maintenance
Safety Stock	Less reliance on safety stock	Often maintained to mitigate supply chain risks
Quality Control	Standard quality checks	Strict quality control for components

HUL :One of India's biggest and most well-known fast-moving consumer goods (FMCG) firms is Hindustan Unilever Limited (HUL). It was founded as Hindustan Vanaspati Manufacturing Company in 1933, and after a 1956 merger with Lever Brothers India Limited, it became Hindustan Lever Limited. In order to highlight its affiliation with the multinational conglomerate of consumer products, Unilever, the firm acquired its current name, Hindustan Unilever Limited, in 2007.

Here are some main elements and features of HUL:

1. extensive Product Portfolio: HUL is recognised for its extensive consumer product portfolio, which includes personal care, home care, food and drinks, dental care, health and hygiene, and more. Some of its trademarks are household names in India and are well-known.
2. Strong Brand Presence: In the Indian market, HUL's brands are linked with quality and trust. Lux, Surf Excel, Dove, and Lifebuoy are just a few of HUL's well-known and trusted brands.
3. Market Leadership: In India, HUL has continuously been a market leader in a number of product categories. It competes with other FMCG behemoths and works hard to maintain and extend its market share.
4. Sustainable Practices: HUL prioritises sustainability and corporate social responsibility (CSR). It has launched a number of sustainability programmes and initiatives aimed at decreasing its environmental effect, improving rural lives, and promoting hygiene and sanitation.
5. Innovation: To innovate and produce goods that respond to changing consumer demands, the corporation invests substantially in research and development. This includes new product compositions, packaging advancements, and other initiatives.
6. Distribution Network: HUL has a vast distribution network that reaches even the most distant areas of India. This network is critical in ensuring that its products are easily accessible to customers around the country.
7. Employee Welfare: The organisation values employee well-being and growth. It is well-known for its advanced human resource practises and has been named an excellent place to work.
8. Global Connection: Unilever, a global consumer products firm headquartered in London, UK, owns HUL. This link allows you to have access to worldwide resources, knowledge, and best practises.
9. Market Expansion: In addition to maintaining a strong presence in urban markets, HUL has made attempts to enter rural markets, recognising the potential for development in these regions.
10. Trend Adaptation: The organisation adjusts to shifting market trends and client preferences. To accommodate the increased demand for such things, it has created products including natural and organic components.

Some of the well-known brands owned by Hindustan Unilever include:

Dove, Lifebuoy, Surf Excel, Rin, Lux, Sun silk, Closeup, Pepsodent, Knorr, Brooke Bond

PROCESS OF INVENTORY MANAGEMENT IN HUL :

Hindustan Unilever Limited (HUL) is a significant consumer goods corporation that, like many others in the FMCG (Fast-Moving Consumer Goods) industry, uses inventory management strategies to guarantee effective product manufacturing, distribution, and supply. While I do not have access to HUL's particular

internal procedures, I can give you an outline of the usual inventory management process in FMCG firms such as HUL:

1. **Demand Forecasting**: Accurate demand forecasting is the foundation of inventory management. HUL must forecast future product demand based on historical data, market trends, and a variety of other criteria.
2. **Purchasing**: After estimating demand, HUL purchases raw materials and components needed for production. To minimise stockouts and overstocking, efficient procurement is critical.
3. **Production Scheduling**: HUL bases its output on demand forecasts and raw material availability. It seeks to generate the appropriate number of things at the appropriate time.
4. **Inventory management**: HUL maintains strategically situated warehouses and distribution centres to guarantee that items are quickly accessible to satisfy market demand. These storage facilities hold both raw materials and completed commodities.
5. **Inventory Classification**: HUL classifies its inventory into categories based on factors like demand patterns, shelf life, and value. This classification helps in applying different inventory management techniques to different categories.
6. **Safety Stock**: HUL maintains safety stock levels to protect against unanticipated demand variations or supply disruptions. These are excess inventory units maintained in reserve.
7. **Inventory Management and Control**: Inventory levels must be monitored on a regular basis. HUL uses real-time inventory tracking technologies and software tools to ensure appropriate stock levels.
8. **FEFO and FIFO**: FMCG items frequently have a limited shelf life. To guarantee that items with the earliest expiry dates are sold first, HUL often uses the "First In, First Out" (FIFO) or "First Expired, First Out" (FEFO) system.
9. **Demand-Driven Resupply**: HUL may employ demand-driven replenishment systems, which automatically initiate orders when inventory hits a certain reorder point.
10. **Supplier Collaboration**: It is critical to maintain strong connections with suppliers and collaborate with them to ensure timely delivery.
11. **Periodic audits and inventory**: Regular audits and physical stock-taking aid in the identification of inconsistencies and the implementation of remedial actions.
12. **Excess or obsolete inventory disposal**: HUL may have methods in place to dispose of surplus or old inventory, such as discounts, promotions, or recycling.
13. **Constant Improvement**: HUL is always reviewing its inventory management systems in order to increase efficiency, save costs, and decrease waste.

ITC: ITC Limited, originally known as the Imperial Tobacco Company of India Limited, is a diverse Indian conglomerate with operations in a variety of industries. It is one of India's largest and best-known corporations. Here's a rundown of ITC and its numerous components:

1. **Entrepreneurship Diversification**: ITC is active in a variety of industries, including:

- **Fast-Moving Consumer Goods** : ITC is well-known for its FMCG items, such as "Aashirvaad" (food products), "Sunfeast" (biscuits), "Bingo!" (snacks), "Classmate" (stationery), and "Fiama" (personal care products).

- **Hotels**: Under the "ITC Hotels" brand, ITC's hospitality segment manages luxury hotels that provide world-class lodging and eating experiences.

- **Agribusiness**: ITC's agribusiness segment handles agricultural commodities, e-Choupal (a rural farmer empowerment project), and branded food goods.

- **Paper and Packaging**: The firm has a strong presence in the paper and packaging industries, with its brand "Classmate" being a key participant in the education sector.

- **Information Technology**: ITC Infotech, a subsidiary of ITC Limited, provides IT services and solutions to customers all over the world.

- **Lifestyle Retailing**: ITC's brands "Wills Lifestyle" and "John Players" appeal to the fashion and clothing retail category.

- **Other Companies**: ITC is also involved in areas such as printing and packaging, safety matches, and others.

2. **Sustainability**: ITC is devoted to sustainable business practises and has been recognised for its efforts in environmental protection, social responsibility, and community development. It has taken tremendous measures to reduce its carbon impact and promote sustainable agriculture.

3. **Rural Development**: ITC's e-Choupal programme is a pioneering effort to give farmers in rural India with real-time agricultural information and market access. It has benefited the lives of millions of farmers.

4. **Corporate Social Responsibility**: ITC is actively involved in numerous CSR activities pertaining to education, healthcare, rural development, and environmental sustainability. It has been recognised for its contributions to society.

5. **Financial Performance**: ITC is a publicly traded business that is listed on Indian stock markets. It has regularly showed strong financial performance and is regarded as one of India's top-performing enterprises.

6. **Global Presence**: While India is ITC's core market, it also has a global footprint through its international business section, which sells items to a variety of nations.

7. Innovation and Leadership: ITC is well-known for its strong leadership and concentration on product development and marketing innovation.

8. Consumer-Centric Approach: ITC focuses on understanding consumer preferences and adjusting its product offers appropriately, which has helped its brands succeed.

ITC Limited is a major player in several areas of the Indian economy, and it is known for its dedication to sustainable business practises and corporate responsibility. It is always evolving and adapting to new market circumstances, all while seeking for development and quality in all of its commercial endeavours.

PROCESS OF INVENTORY MANAGEMENT IN ITC :

To guarantee the proper handling of its varied variety of products, ITC Limited, a multinational conglomerate with holdings in many sectors, implements a sophisticated inventory management system.

This extensive procedure includes numerous critical components:

1. Demand Forecasting: The careful process of demand forecasting is at the heart of ITC's inventory management approach. This complex technique employs historical data, market trends research, and seasonality evaluation to accurately forecast future product demand.

2. Procurement and Strategic Sourcing: ITC's procurement section takes a multidimensional strategy, expertly acquiring raw materials, components, and finished items to meet painstakingly projected demand. This multifaceted project demands skilled supplier negotiation, tight quality control techniques, and diligent lead time management.

3. Inventory Stratification: ITC's strategy includes the segmentation of inventory into separate groups. This categorization, which is influenced by factors such as demand volatility, product shelf life, and monetary worth, serves as the foundation for developing effective inventory management methods for each category.

4. Development of a Safety Stock: ITC rigorously maintains safety stock levels to reduce the inherent risk of stockouts caused by unanticipated increases in demand or disruptions in the supply chain. This conservative inventory reserve protects against any stockouts.

5. Inventory Oversight and Governance in Real Time: ITC's inventory management is supported by a sophisticated set of tracking tools and software that provides real-time insight into inventory levels. This dynamic monitoring capacity enables the organisation to conduct reorder operations proactively, avoiding the risks of overstocking or stockouts.

6. Application of ABC Analysis: ITC uses an ABC analysis approach to rationally allocate inventory management resources. "A" items, which have a high value, receive immediate attention; "B" items,

which have a moderate value, are handled prudently; and "C" things, which have a lesser value, are subject to simplified management methods.

7.Demand-Driven Replenishment Protocols: - ITC has implemented cutting-edge technologies that automatically trigger replenishment orders when inventory levels exceed predetermined reorder criteria. This automation guarantees that inventory is replenished as soon as possible, strengthening the supply chain's resilience.

8.Synergistic Supplier Collaborations: The development of tight ties with suppliers is a critical component of ITC's inventory management strategy. These strategic collaborations help to ensure on-time delivery and contribute significantly to the supply chain's operating efficiency.

9.Routine and Comprehensive Inventory Audits: Comprehensive audits, which include physical stock-taking and rigorous analysis, are an important method for detecting inconsistencies and anomalies in the inventory management process.

10.Obsolete Inventory Management: ITC has comprehensive systems in place for identifying and disposing of surplus or obsolete inventory. These well-defined procedures make it easier to free up precious storage space while lowering costs.

11.Environmental Concerns: Along with traditional inventory management concepts, ITC exhibits a conscious commitment to environmental sustainability. This includes practises like reducing unnecessary packing and minimising waste within the inventory management system.

12.Pursuit of continual Improvement: ITC's inventory management system is based on a culture of continual improvement. The organization's continuous dedication to refinement extends to a thorough examination of existing processes, the discovery of emerging technologies, and the relentless pursuit of ways to optimise efficiency, reduce costs, and improve the overall efficacy of the supply chain.

This comprehensive and varied approach to inventory management illustrates ITC's commitment to precision, efficiency, and agility in an ever-changing business market.

P&G :P&G is one of the world's largest and most recognisable consumer products corporations. It has a long history that dates back to 1837, and it now operates as a worldwide firm with a diverse portfolio of household and personal care goods. Here's a rundown of P&G:

1. Diverse Brand Portfolio:

- P&G is well-known for its vast and diversified portfolio of consumer products, which includes beauty and grooming, health and well-being, household care, and infant care. Among its well-known brands are:

- Grooming and Beauty: Pantene, Gillette, Olay, and Head & Shoulders. Crest, Oral-B, and Vicks are examples of health and wellness brands.

- Laundry: Tide, Pampers, Downy, Swiffer.

- Baby care products include Luvs and Pampers.

2. Global Presence: P&G is a genuinely global firm, with operations in over 180 countries. Its goods are utilised by billions of people throughout the world.

3. Research and Innovation : P&G places a high value on innovation and research. It spends substantially in R&D to generate new and improved goods that match consumers' evolving requirements and tastes.

4. Branding and marketing: P&G is well-known for its marketing and branding initiatives. The corporation has a track record of strong advertising campaigns that have helped its brands become household names.

5. Initiatives for Sustainability: P&G is dedicated to sustainability and has set lofty targets for decreasing its environmental footprint. It focuses on issues such as responsible sourcing, waste reduction, and the design of sustainable products.

6. Corporate Social Responsibility: P&G participates actively in corporate social responsibility (CSR) projects. It funds a variety of educational, gender equality, and community development programmes.

7. Employee-Centered Culture: P&G is a top employer that develops an employee-centric culture that emphasises diversity, inclusivity, and professional growth.

8. History of Innovation: P&G has a history of creating game-changing products. It invented the first synthetic detergent (Tide), as well as the first fluoride toothpaste (Crest).

9. Market Change Adaptation: P&G adjusts constantly to changing customer tastes and market conditions. To remain competitive, it has unloaded certain brands and bought others.

10. Excellent financial performance: P&G is a publicly traded firm that is listed on many major stock markets. It has continuously delivered outstanding financial results and is a major participant in the global consumer products market.

P&G's dedication to innovation, branding, and sustainability, along with its diversified product line, has enabled the company to retain a strong position in the consumer products market. Millions of people across the world use the firm's goods on a daily basis, and the company continues to evolve and adapt to suit the requirements of consumers in an ever-changing marketplace.

PROCESS OF INVENTORY MANAGEMENT IN P & G :

1. Demand Forecasting and Market Dynamics Analysis: P&G begins their inventory management orchestration with a thorough assessment of market complexities. This multidimensional approach anticipates potential customer demand with amazing accuracy by incorporating a sophisticated combination of historical data, consumer behavioural research, and detailed demand forecasting algorithms.

2. Procurement Strategies and the Complexity of the Supply Chain: The procurement models used by P&G are representative of complex discussions with a network of suppliers. This precise sourcing choreography entails demanding quality assurance, exacting lead time management, and complicated orchestration of raw material and component procurement.
3. Hierarchical Inventory Stratification: For its inventory, P&G uses a granular stratification schema based on subtle characteristics such as demand volatility, product perishability, and monetary valuation. This classification serves as the architectural framework for intricate inventory management systems.
4. Buffering with Prudence in Safety Stocks: The development of safety stock is an essential component of P&G's inventory management philosophy. This painstakingly maintained inventory buffer protects against unexpected demand surges or the impending threat of supply chain fluctuations, guaranteeing resilience in the face of stockouts.
5. Real-Time Surveillance and Automated Replenishment Symphony: P&G uses comprehensive inventory monitoring technologies that provide real-time visibility into inventory tiers. When predefined reorder thresholds are exceeded, these technologically coordinated processes play an important role in orchestrating automated replenishment triggers, bolstering the bastion of supply chain resiliency.
6. ABC Analysis Discrimination: P&G's inventory management concept is bolstered by judicious application of the ABC analysis framework. Extensive scrutiny is applied to high-value "A" goods, while moderate-value "B" items are subject to close supervision, and low-value "C" things are treated with simplified governance.
7. Supplier Collaboration Consortia: P&G works hard to cultivate collaborative connections with its supplier network, which is supported by a web of sophisticated supply chain management principles. These synergistic alliances promote the timely delivery of raw materials, hence expanding the scope of operational efficiency.
8. Routine Auditory Scrutiny and Stock-Taking Routines: P&G's inventory management model includes routine detailed audits and meticulous physical stock-taking methods. These extensive examinations serve as a diligent watchdog against any disparities and anomalies.
9. Governance of Obsolete Inventory: P&G methodically establishes methods for the identification and prudent dispose of obsolete or surplus inventory. These precisely crafted methods liberate important storage space and result in cost structure rationalisation.
10. Environmental Awareness: In addition to traditional inventory management canons, P&G is concerned with environmental issues. The incorporation of sustainable practises, such as packaging waste reduction, is delicately knit into the very fabric of their inventory management paradigm.

11. Unwavering Commitment to Continuous Enhancement and Technological Assimilation: The constant augmentation mentality pervades P&G's inventory management mode. An unwavering commitment to refinement manifests itself in the continuous assessment of existing processes, the exploration of cutting-edge technologies, and the unwavering pursuit of strategies aimed at optimising operational efficiency, mitigating fiscal outlays, and elevating the supply chain's overall efficacy.

In summary, P&G's approach to inventory management is a sophisticated symphony of rigorous forecasting, procurement artistry, cutting-edge technology integration, collaborative agreements with suppliers, and an unshakable commitment to environmental sustainability. It is a resounding witness to the organization's commitment to precision, efficiency, and appropriate inventory management methods.

CONCLUSION :

Any organisation that wants to make sure that it has the proper amount of inventory at the right time must have an inventory management system.

It involves planning, ordering, receiving, storing, and monitoring inventory levels and can significantly affect a company's success or failure.

Businesses can keep track of their stock levels and order the proper amount of inventory to meet client requests by combining efficient inventory systems and techniques.

Inventory management process in FMCG firms like demand forecasting, purchasing, inventory classification, FEFO and FIFO, development of a safety stock, application of ABC analysis .

REFERENCES

Aro-Gordon, S., & Gupte, J. (2016). Review of modern inventory management techniques. *The Global Journal of Business and Management*, 1, 1–22.

Chin, C., Ramiah, S., & Razali, N. F. (2023). *Inventory Management Systems (IMS)*. 2600–7304.

Inegbedion, H., Eze, S., Asaleye, A., & adedoyin isola, L. (2019). Inventory Management and Organisational Efficiency. *The Journal of Social Sciences Research*, 756–763. <https://doi.org/10.32861/jssr.53.756.763>

J, A., Onifade, M. K., & Odeyinka, O. (2017). Evaluation of the Role of Inventory Management in Logistics Chain of an Organisation. *LOGI*, 8, 1–11. <https://doi.org/10.1515/logi-2017-0011>

Lokhande, J., & Lokhande, M. (2022). *A STUDY ON INVENTORY MANAGEMENT WITH SPECIAL REFERENCE TO EGoF ENGINEERS PVT. LTD.* 7, b285–b295.

- Özer, Ö. (2011). *Inventory Management: Information, Coordination, and Rationality* (pp. 321–365). https://doi.org/10.1007/978-1-4419-6485-4_13
- Panigrahi, R. R., Tanty, D., Jena, Mr. D., & Das, D. (2019). Advance Inventory Management Practices and Its Impact on Production Performance of Manufacturing Industry. *International Journal of Recent Technology and Engineering*, 8. <https://doi.org/10.35940/ijrte.D8266.118419>
- Sheakh, T. (2018). A Study of Inventory Management System Case Study. *Journal of Dynamical and Control Systems*, 10, 1176–1190.
- Silver, E. (2008). Inventory Management: An Overview, Canadian Publications, Practical Applications and Suggestions for Future Research. *Infor*, 46. <https://doi.org/10.3138/infor.46.1.15>