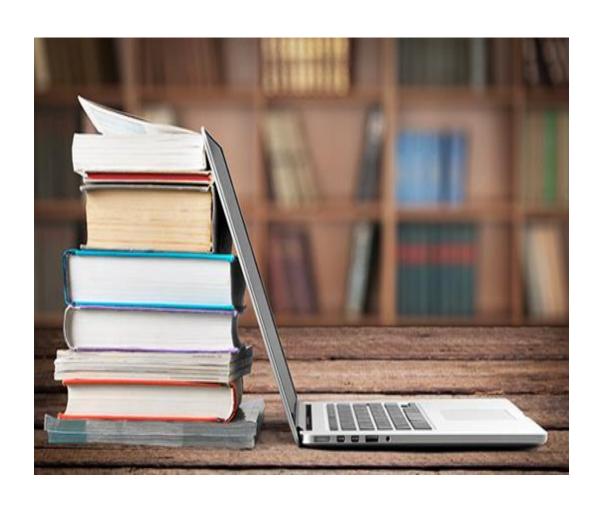# LITERATURE SURVEY
RETAIL STORE STOCK INVENTORY ANALYSIS

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Team Size : 4

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DOMAIN: DATA ANALYTICS

Retail Store Stock Inventory Analytics

Objectives :

Retail inventory management is the process of ensuring you carry merchandise that shoppers want, with neither too little nor too much on hand. By managing inventory, retailers meet customer demand without running out of stock or carrying excess supply.In practice, effective retail inventory management results in lower costs and a better understanding of sales patterns. Retail inventory management tools and methods give retailers more information with which to run their businesses, including:

- ✝ Product locations
- ✝ Quantities of each product type
- ✝ Which stock sells well and which doesn't, by location and sales channel.
- ✝ Profit margin by style, model, product line or item
- ✝ Ideal amount of inventory to have in back stock and storage
- ✝ How many products to reorder and how often

IMPORTANTS OF RETAIL STORE STOCK INVENTORY ANALYSIS:

✚ Inventory management is vital for retailers because the practice helps them increase profits.

✚ They are more likely to have enough inventory to capture every possible sale while avoiding overstock because Too much inventory means working capital costs, operational costs, and a complex operation.

✚ Based on the inventory management analysis we can manage how much inventory is required for selling the product based on which they can calculate the profit & losses.

S.NO	AUTHOR	TITLE	YEAR	CONTENT
1.	ISRAA MOHAMED	Machine Learning Algorithms for COPD Patients Readmission Prediction: A Data AnalyticsApproach	2015	In This study,weaimat predicting the readmissionof COPD (Chronic Obstructive Pulmonary Disease) patients through the deployment of machine learning algorithms. Area Under Curve (AUC) and ACCuracy (ACC) were considered as the main criteria for evaluating models' prediction power in each time frame. Then, the importance of the variables for each outcome was explicitly identified, and defined important variables have then been differentiated. Our study could achieve the highest accuracy in predicting readmission with %91 ACC.
2.	EUN KYONG SHIN AND	UrbanDecayand Pediatric Asthma	2018	To further improve public health decision making, the health issue should be approached with a more holistic view with

	ARASH SHABAN-NEJAD	Prevalence in Memphis, Tennessee: Urban Data Integration for Efficient Population Health Surveillance		taking into account environmental, residential, and social conditions. Integrating multiple data sources helps us not only discover the hidden links between quality of housing and childhood asthma in an urban community but also provide more efficient health surveillance guidelines to identify the population at risk.
3.	Jorge Andres Espinoza Aguirre	Inventory record inaccuracy and storelevel performance	2017	Inventory management is one of the important business processes which ensure that the supply of raw materials and finished goods remain continuous throughout the business operations. It could be during manufacturing or production to ensure smooth operations andorganization as it relates to purchases, sales and logistic activities [1]. Inventory management systems has the objective of ensuring smooth running of the production process, reduce the ordering cost of inventory, take advantage of quantity discount, and avoid opportunity loss on sales

4.	Hien Vu	Inventory management in retail industry - Application of big data analytics	2018	The retail industry is becoming rigorously competitive and narrowly profitable that retailers find themselves in a dilemma of neither excessive in- stock nor depleted outof- stock is negotiable. The report finds the prospects of integrating BDA in the conventional inventory management techniques and promoting the viability and appropriateness of these models in the bigdata era.
5.	Ariful Islam	Analysis of Different Inventory Control Techniques	2019	A small saving in the inventory will mirror a crucial edge in benefit of the organisation. In Bangladesh, the retail shops generally face two types of inventory related problems which are either stock-out or overstock. As a result, most of the shops fail to maintain their product availability with lowest possible inventory cost. Through proper inventory control techniques, probability of stock-out as well as overstock situations in the retail shops can be minimised.

| 6. | Mirco Sturari | Retail surveying and inventory using visual and textual analysis | 2017 | The manpower cost for surveying and monitoring the shelves in retail stores are high, because of which these activities are not repeated frequently causing reduced customer satisfaction and loss of revenue. Further, the accuracy of data collected may be improved by avoiding human related |