

### **Ideation Phase - Literature Survey**

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<b>Project Name</b>	<b>Retail Store Stock Inventory Analytics</b>

#### **ABSTRACT:**

As the retail market becomes extensively competitive, the ability to optimise on serving business processes while satisfying customer expectations has never been more important. Therefore, managing and channelizing data to work towards customer delight as well as generate healthy profits is crucial to survive prosperously. In the case of big retail players internationally as well as in India, data or rather big data analytics is now being applied at every stage of the retail process - tracking emerging popular products, forecasting sales and future demand through predictive simulation, optimising product placements and offers via customer heat-mapping and many more. Alongside this, identifying the customers likely to be interested in particular product types based on their previous purchase behaviours, working out the best way to approach them through targeted marketing efforts and finally working out what to sell them next is what forms the core of data analytics. This article is the outcome of a descriptive research on the past, present and future of the retail industry and the application of business analytics in shaping appropriate marketing strategies.

#### **INTRODUCTION:**

##### **INDIAN RETAIL INDUSTRY:**

Backed by robust economic growth and rising household incomes, consumer spending in India is expected to touch \$3.6 trillion (about Rs.240 trillion) by 2020, increasing India's share in global consumption to 5.8%—more than twice its current levels. By 2020, India's retail sector is expected to double to \$1.1-1.2 trillion from \$630 billion in 2015 at a compound annual growth rate (CAGR) of 12%, says a joint report titled "Shaping Consumer Trends" released by FICCI (Federation of Indian Chambers of Commerce and Industry) and consultancy Price water house Coopers. The report's projections indicate that the average household income in India will triple to \$18,500 in 2020, from \$6,400 in

2010—acting as a major driver in retail growth and leading to evolution of new consumer segments. Customers are getting more sophisticated, driving firms to focus on premium products, the report said.

## 5 BENEFITS OF INVENTORY MANAGEMENT



## COMPONENTS OF RETAIL STORE STOCK INVENTORY ANALYTICS:

According to a new report titled, “Driving Retail store stock inventory Growth by Leveraging Analytics” by consulting firm PricewaterhouseCoopers (PwC) and the Retailers Association of India (RAI), a successful retail analytics strategy, will cover the following six areas:

**1 Predictive modelling:** Developing an analytical model to predict future outcomes and empower business users to make decisions quickly.

**2 Big data and hybrid architectures:** Convergence of structured and unstructured data through data integration across apps, sensors, social media and other channels.

**3 Cloud analytics:** Highly scalable and easy way to store and access relevant information, which allows users to access more data faster.

**4 Advanced visualisations:** Present data in visually compelling ways, enabling companies to expand business intelligence capabilities extended to their executives and other employees.

**5 Self-service analytics:** Making analytics a more democratic process by allowing users to make decisions based on their own queries without requiring any sophistication.

**6 Real-time in-memory:** A move ahead of the traditional relational database that can help retail analysts to generate deeper insights across the entire value chain of retail operations, including procurement, supply chain, sales and marketing, store operations, and customer management

## **CHALLENGES IN RETAIL STORE INVENTORY ANALYTICS:**

Retailers have already started putting data analytics at the heart of their operations across the value chain - procurement, supply chain, sales and marketing, store operations, and customer management. However, they now need to establish a big data ecosystem, which processes multiple terabytes of new data and petabytes of historical data, which will help them improve their revenues via analytics-based decision-making.

## **CONCLUSION:**

Retailing store stock analysis is at the platform for more data-driven disruption because the quality of data available from internet purchases, social-network conversations, and recently, location-specific smartphone interactions have emerged into a new entity for digital based transactions. Improved performance, better risk management, and the ability to unearth insights that would otherwise remain hidden, are the benefits organisations reap through utilisation of big data management. Retailers can benefit immensely from a structured analytics-driven approach that will help them understand how their customers are using their products and services, how their operations and supply chain are performing, how to manage their workforce and how to identify key risks - insights that they then can then act upon.