**IBM – Naalaiya Thiran**

**Retail Store Stock Inventory Analytics**

# Literature Survey

## The importance and usage of Business intelligence technologies in the retail industry

**Authors:** Gang, Kai & Bei

The increase in data available due to the advent of automation, modern technologies and standards have made the decision-making process in business become complicated. The key technologies used in business intelligence are Data Warehouse, Online Analytical Processing (OLAP), Data Mining and Release & Express technology. The main applications of a BI system are profit analysis and KPI (Key Performance Indicators) Management, client service management and environmental analysis.

## Data-driven segmentation of customer behavior in the retail industry

**Authors:** Carmichael, Chen & Luo

The traditional marketing strategies are data-driven and include Business analytics to improve customer relevancy and efficiency. Customer segmentation has become an important part of marketing analytics because it allows the customers to be grouped based on their purchase behaviors, segment demographics, and behavioral evolvement. This segmentation is used to create tailored marketing campaigns based on the target customers to have an idea of the effectiveness of a campaign for each segment. Gathering enough data to analyze it for each segment has been the main limitation here.

## Recommendation systems using recommender algorithms

**Authors:** Chavan & Mukhopadhyay

Such systems use the past purchase history and the customer's search data to supply relevant recommendations for the customer. All big companies such as Amazon and Netflix personalize the content for the user based on their shopping habits and behavior patterns. An effective recommendation system can increase sales manifold, by presenting users with items that they would need before the user even recognizes they need it. The hybrid recommendation algorithms are more suitable in the e-commerce field. It improves the quality and efficiency by providing the user with a great shopping experience