PRESCIENCE

Vida for Retail: Rebooting Retail with the Power of Data Analytics

A Prescience Decision Solutions Whitepaper

Achieving business execution excellence in retail with advanced data sciences

There used to be a time when purchase decisions were based on recommendations of the neighborhood grocery manager. Today, these purchase decisions are driven by technology, bringing together the collective wisdom of consumers of the same product from across the world.

Technology has disrupted the retail sector like no other sector in this century. And the disruption is for all to see and it is just the beginning. Thanks to mobile devices and ecommerce, shopping today has become an easy three-step process — Browse, Select and Pay — done anytime, anywhere.

One important aspect that has come out of such a dynamic business landscape is that the focus is back on the customers, instead of brands and advertisements. Customer engagement and hyper-personalized shopping experience have now become key drivers to foster growth, sales and customer retention for retail companies.

At the same time, while the focus is on improving the shopping experience of the customers, are we enabling retail executives to serve them better? Technology and AI can be leveraged not just improve customer experience but also enable the retail executives to effectively deliver on that promise.

Today, the retail sector is focusing on key imperatives that are helping deliver excellence through advanced data sciences. We take a look at a few such aspects and delve deeper into each aspect.

1. Customer experience and engagement are the key to success

With sensors and digital technologies (digital devices and data sciences), it is easier than ever to track a customer's behavior, emotions and preferences in real time, and retailers can respond immediately with personalized products and services.

2. Cost pressures are rising

Margins are increasingly under pressure from rising costs, lower pricing power and the need to invest in digital transformation.

3. New customer expectations have created a new retail world

Technology has made it easier than ever for shoppers to consume information, find and compare products or services and easily share their experiences.

4. Artificial intelligence is gaining more clout

The opportunity is in the use of artificial intelligence/machine learning and bots to power various insights, predictions and prescriptions.

RETAIL TRANSFORMATION DRIVEN BY ADVANCED ANALYTICS

The time has come for retail companies to leverage the power of advanced analytics to enhance business profitability and performance, know customers and their needs better, and improve operational efficiencies.

Here are some key areas companies must look into to achieve these goals:

1. Develop consistent **profitability metrics** across departments and align top-down and bottom-up plans

2. Get a **personalized view of your customers** to curate – and create – products tailored to the individual

3. Increase visibility into core operations to improve efficiency and reduce costs

4. Optimise pricing to improve margins and attract more customers

5. Use known preferences to **define offers with precision and contextualize marketing** to build loyalty and influence repeat purchase

6. Make stores **more flexible and adaptable,** and equip store associates with better insights for customer and employee interactions

VIDA FOR RETAIL: PRESCIENCE AI SOLUTION TO ENABLE BREAKTHROUGH CUSTOMER EXPERIENCE

How well do retail companies know their customers and their purchasing patterns? Do they have the right tools and techniques to track store footfall, identify customer preferences and engage them effectively? Prescience offers an AI-based solution that helps retailer to connect with customers better and give them a delightful shopping experience.
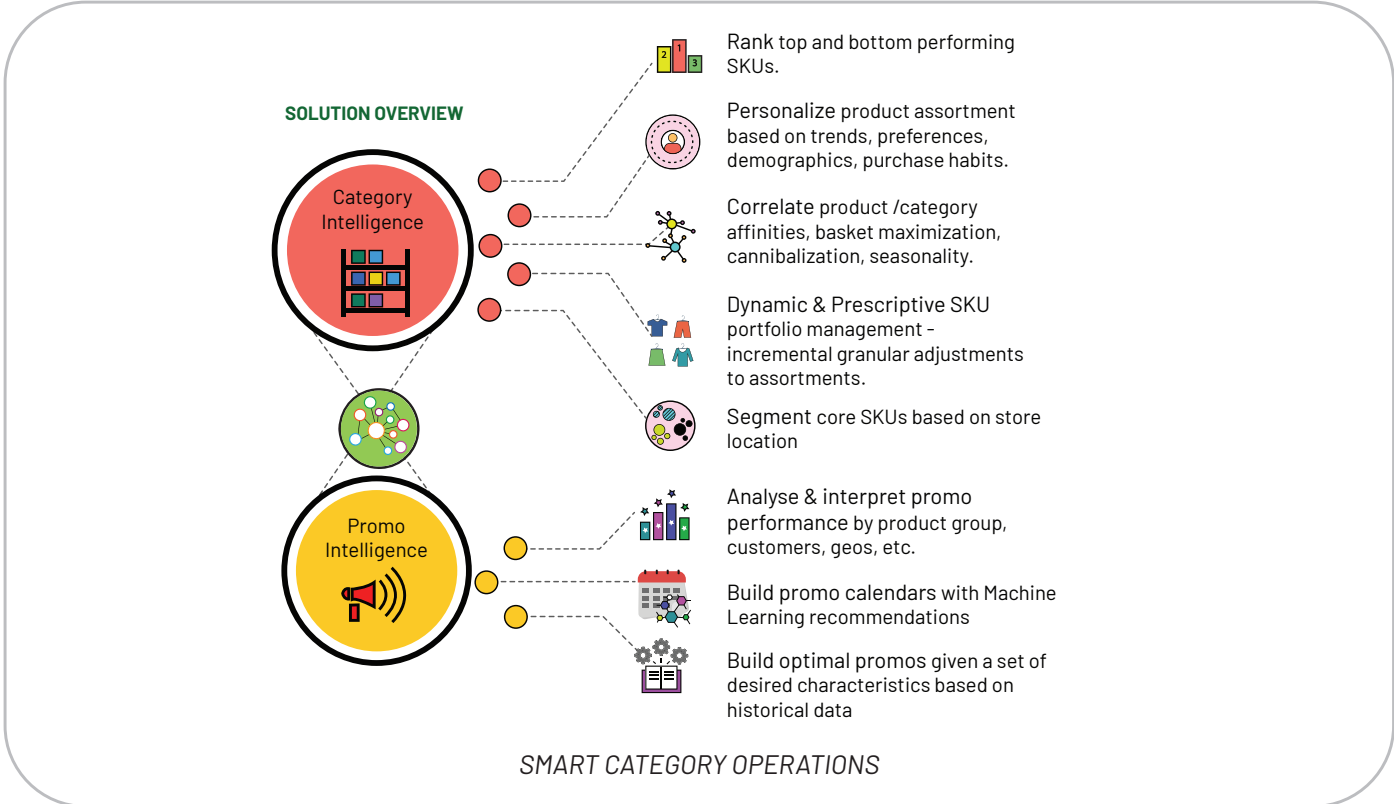

ENABLE BREAKTHROUGH CUSTOMER EXPERIENCE
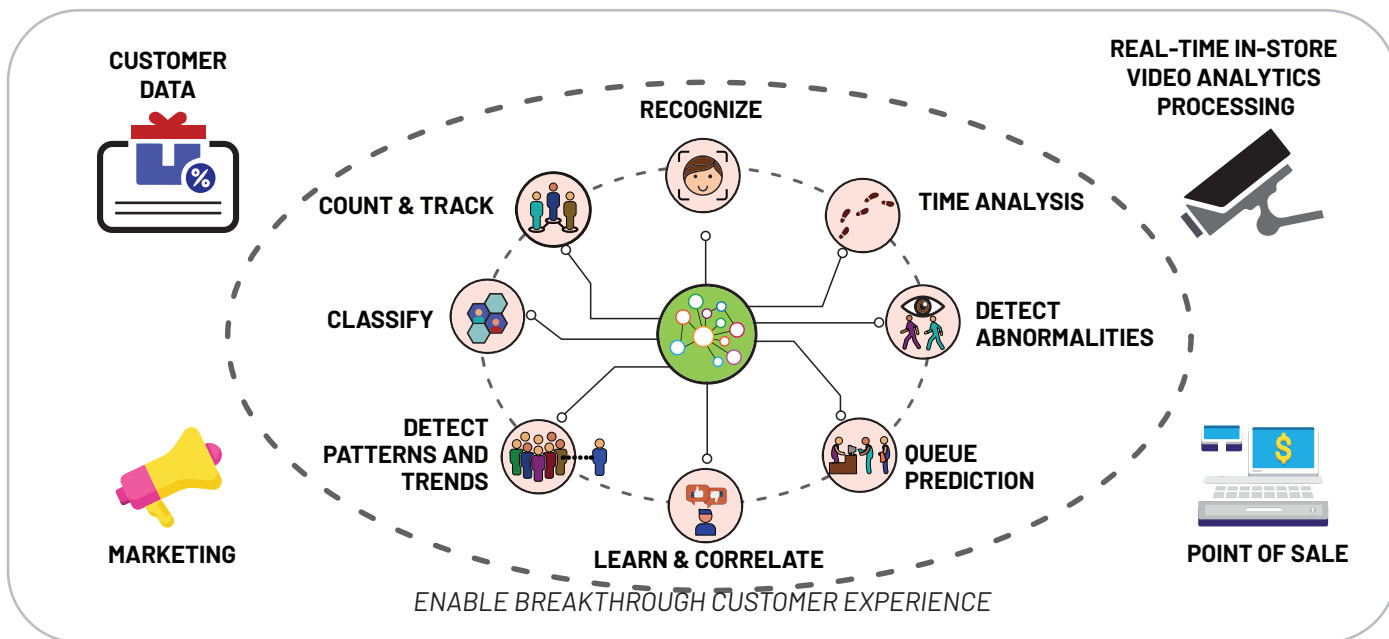
Expected results

1. Identify key customer segments and their behaviour

2. Optimize store operations and respond quickly to customer needs and trends

3. Reduce customer wait times and improve quality of service

4. Make in-store promotions, product placements effective

5. Personalize product recommendations, promos and rewards

ADAPTIVE AI FOR SMART CATEGORY OPERATIONS

How effective are retail companies in planning and optimizing assortments, demanding forecast accuracy, achieving high planogram compliance, or analysing the performance promotional campaigns? Prescience brings an AI-based solution that ensures efficient business operations for retail stores.
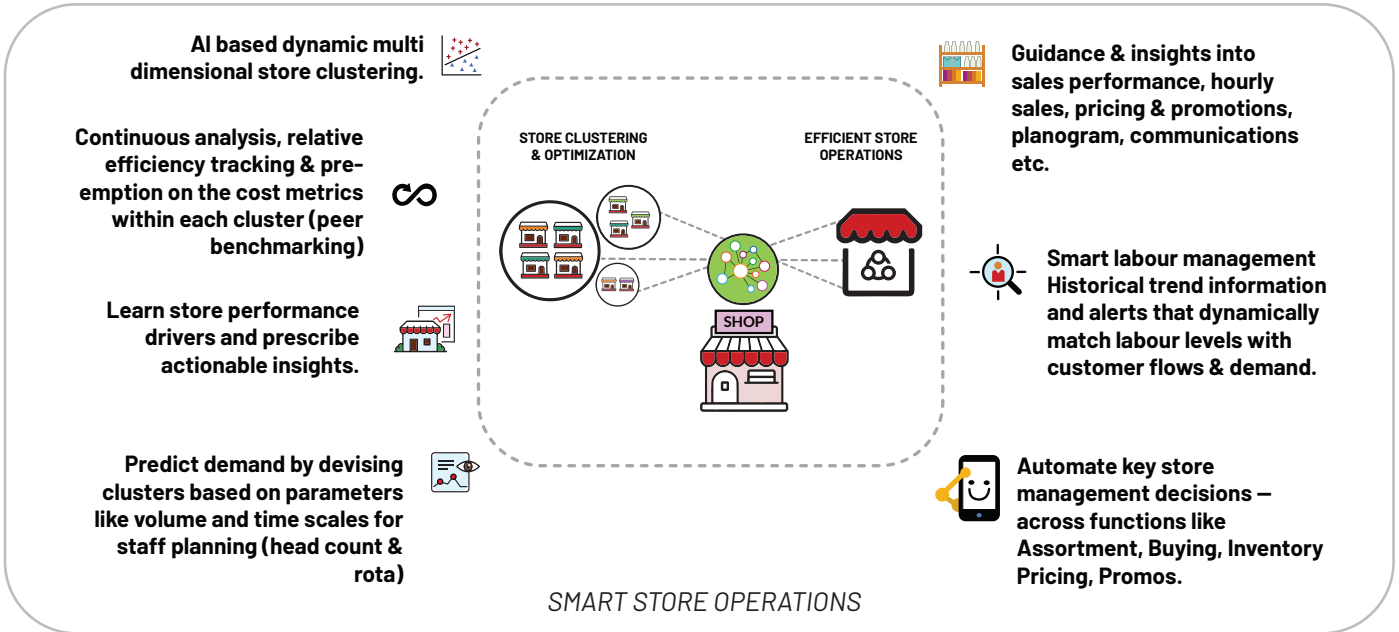
SOLUTION OVERVIEW

Category Intelligence

Promo Intelligence

Rank top and bottom performing SKUs.

Personalize product assortment based on trends, preferences, demographics, purchase habits.

Correlate product /category affinities, basket maximization, cannibalization, seasonality.

Dynamic & Prescriptive SKU portfolio management - incremental granular adjustments to assortments.

Segment core SKUs based on store location

Analyse & interpret promo performance by product group, customers, geos, etc.

Build promo calendars with Machine Learning recommendations

Build optimal promos given a set of desired characteristics based on historical data

SMART CATEGORY OPERATIONS

Expected results

1. Optimize SKU distribution to manage high performers and reduce OOS
2. Maximize sales by localizing assortments by store/region
3. Optimize SKU distribution, inventory allocation, facings needed, and even production
4. Take action on underperforming SKUs before significant loss occurs

5. Maximize sales and provide a better buying experience
6. Focus on the promos that work
7. Target the right promos at the right time
8. Get >1% to 5% lift in top-line sales through targeted promos

ADAPTIVE AI FOR SMART STORE OPERATIONS

In a time when retail stores are mushrooming at an unprecedented pace, the mantra to survive and sustain in a competitive business landscape depends on how good a retail store's operational efficiency is. Robust store-level strategies, smart labour management, store automation and performance management are some of the key imperatives stores must focus on to drive superior outcomes and growth. Prescience's solution based on Adaptive AI for smart store operations takes such apsects of growth into consideration.

PRESCIENCE

AI based dynamic multi dimensional store clustering.

Continuous analysis, relative efficiency tracking & pre-emption on the cost metrics within each cluster (peer benchmarking)

Learn store performance drivers and prescribe actionable insights.

Predict demand by devising clusters based on parameters like volume and time scales for staff planning (head count & rota)

STORE CLUSTERING & OPTIMIZATION

EFFICIENT STORE OPERATIONS

SHOP

Guidance & insights into sales performance, hourly sales, pricing & promotions, planogram, communications etc.

Smart labour management Historical trend information and alerts that dynamically match labour levels with customer flows & demand.

Automate key store management decisions — across functions like Assortment, Buying, Inventory Pricing, Promos.

SMART STORE OPERATIONS

Expected results

1. Proactively work on costs, provide new targets to stores to improve performance
2. Create customized cluster-level execution strategies pertaining to promotions planning, assortments, pricing, etc.

3. Monitor and benchmark stores & facilitate knowledge sharing of best practices
4. Increase store efficiency and optimize operations

CASE STUDY
IMPROVING ROI AND SAVING COSTS WITH PERSONALIZED PROMOTIONS

Business challenge
World's leading online marketplace portal used to run 150 promotions in a year targeting more than one million active sellers. The promotions lacked the required efficiency and personalization for the sellers and for the e-commerce portal. There was an urgent need to customize promotions by optimizing promo targeting and promo offers to improve net revenue and ROI.

Solution offered
Prescience classified sellers into different segments based on multiple criteria, such as their listings, GMV contribution, average selling price of items, quantity of sold items, and more. Each seller was given a score using the Heterogeneous Treatment Effects model. Based on these scores, we identified the seller segment who would list anyway on the website and also sellers who would list more with a promotion.

Business outcomes
By excluding sellers who would list themselves on the website without receiving a promotion, the client was able to save significant costs and improve ROI with little impact on the gross merchandise volume.

HOW DOES PRESCIENCE MAKE THIS POSSIBLE?

Advanced Analytics

Domain Expertise

We understand your data that is key to advance to the next level, and use our domain knowledge that allows for an even deeper understanding than ever before

Predictive and Prescriptive Analytics

Our data scientists are proficient in advanced data science techniques - Image / Text Mining, Segmentation, Predictive Analytics, Deep Learning and they go beyond the traditional understanding of the fundamentals

Optimization Techniques

They allow to get actionable insights that have a direct effect on your business and can help you to understand what is happening and optimize accordingly

Data Discovery and Visualization

Dashboarding

Visualization is vital to understand what can be done with data. Our approach is based on storytelling, advanced visualization and dashboarding to showcase what is happening

Retail KPIs

Our focus on insights and information ensures that we display them correctly, clearly and without distraction in a manner that can be quickly examined and understood

Data Management and Engineering

Data quality, Governance & Standardization

We work with a clear vision and an understanding of policies, practices and procedures that properly help manage the collection, quality and standardization of data

Big Data

Big Data management has to be future-proof and secure; we bring the competency to connect with different data sources; structured, unstructured, internal and external

Data Management

Retail analytics is all about processing huge amount of data. We bring our technical chops in end to end provisioning and management of this data while ensuring the quality and consistency fit for analytics.

About Prescience Decision Solutions

Prescience is a business focused analytics firm that empowers organizations to find meaningful insights in their data. Our Business-Backward Approach helps create tangible data-driven solutions that provide users with timely inputs for astute decision making. We do this by leveraging our expertise in machine learning and advanced data science technologies, deep domain knowledge and our customers' business knowledge.
Visit us at www.prescienceds.com or send us an email at info@prescienceds.com to get in touch with us. You can also follow us on LinkedIn.