TCS Optumera™ - AI powered Merchandise Optimization Suite

Retail
To thrive in today’s highly dynamic environment, marked with growing customer touchpoints, stifling competition, rapidly shrinking margins, and increasingly hard-to-please shoppers, retailers must assume a multifaceted role of being curators of experiences and products. AI solutions eliminate the need for transactional and repetitive analysis, augment and amplify human intelligence, identify critical factors that influence sales and profits, enable intelligent and real-time decision-making, equipping merchants with scientific reasoning to make business decisions with confidence.

Tata Consultancy Services’ (TCS’) Optumera™ harnesses the power of AI with high-dimensional, concurrent, always-on optimization to enable retailers to hyper-localize and optimize their assortment, space and pricing strategies in an integrated way, with greater speed and precision in decision-making. With the ability to process over 3,000 heterogeneous data parameters and simultaneously optimize space, mix, and price across siloes, Optumera helps retailers identify demand signals and marketplace changes, thereby driving market competitiveness and customer delight.

**Overview**

Globally, the retail industry loses billions on revenue owing to losses from inventory overstocks, item spoilage and mispriced products. Inability to predict success of strategies by modelling cross impacts, siloed decisions on space-mix-price-inventory, limited demand sensing capabilities and retail complexities challenge decision-makers and stifle business growth.

TCS Optumera, is an AI powered merchandise optimization suite for strategic decision making, which helps merchants to answers complex strategy determining questions such as ‘How can I increase revenue by X% percent y-o-y in the next quarter? Which lever do I change - Space, mix or price?’ It considers more than 3000 factors, such as demography, competition, weather, customer preferences, demand transferability, performance, online metrics, category specific factors such as firmographics, petographics and others which impact the business KPIs. Based on the decomposition of sales-driving factors, it identifies sales, margin and cost opportunities and recommends change in merchandising levers to optimize their space, price and product mix in an integrated manner. Its white box approach to AI helps business users understand step by step the ‘why’ behind the recommendation. The solution is built for scale and employs robust proven AI models, machine learning algorithms and deep learning techniques, on a big data platform, to model customer behavior, preempt competition strategies, identify growth opportunities and provide optimized recommendations. While enabling users to add constraints and analyze multiple scenario simulations, it combines the powers of users’ intuition and creativity with AI models and machine learning.

**Our Solution**

The suite includes:

**Macro space optimization:** Enables retailers to localize and right-size store space allocations, while blending in assortment, price, promo, inventory, and store labor and execution cost considerations, to recommend optimal space

**Price optimization:** Intelligent automated item linkages, robust three-tiered image-based item matching, and optimized vendor deals and flexible advanced business rules sets help plan and execute customer-centric price recommendations across channels, considering the impact of assortment, inventory, and space to improve profitability, prevent margin erosion, and enhance customer loyalty

**Omni-channel assortment:** Backed by data-driven insights on shopper decision tree, demand transferability, customer choice sets, store clustering, and market trends, Optumera helps retailers localize and curate the right product assortment across channels. Competitive assortment insights help understand the gaps in retailers’ assortment compared to market

**Recognyze:** A robust AI engine helps identify item inventory gaps and misplaced items on the shelf, as well as measure in-store planogram compliance to ensure higher in-store availability and drive last mile execution efficiency
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Benefits

With TCS Optumera, retailers can realize the following benefits:

- **Increased sales and higher margins**: Drive a 3-5% increase in sales and margins by localizing the product mix, right sizing space, and pricing competitively.

- **Reduced inventory cost**: Reduce out-of-stock and over-stock across channels, with the right mix and right space; reduce inventory holding costs and improve product availability.

- **Enhanced price image without gross margin erosion**: Improve price competitiveness and mitigate margin erosion through strategic, responsive, and pre-emptive pricing mechanism.

- **Better ROI**: De-risk investments through quick simulation, analysis, and accurate forecasting.

- **Improved in-store compliance**: Measure in-store shelf compliance and ensure last mile execution of merchandising strategy.

- **Shorter time-to-market**: Improve process efficiency by 30-50% and provide the ability to execute over 5x strategies in stipulated time with ‘always on’ optimization. Optumera also helps to improve bandwidth management owing to process standardization.

The TCS Advantage

TCS offers augmented business services to help retailers achieve business outcomes faster, leading to quicker ROI. By partnering with us, retailers can avail of the following advantages:

- **Domain expertise**: TCS has partnered with several global retailers in their transformation journeys. The contextual knowledge gained over the course of these engagements has enabled us to build cost-effective, high-performance solutions designed to meet the challenges of the retail industry.

- **Full-services play**: TCS has a deep understanding of industry dynamics, which helps us offer a wide array of services including business case development, readiness assessment, business process definition, integration, implementation, business process services, change management, and business support services.

- **Flexible business models**: TCS works with retailers to define the business model best suited for their unique requirements; services are delivered in an agile manner using the Machine First Delivery Model™.
Awards & Recognition

To know more
Visit the Retail page on tcs.com
Email: retail.solutions@tcs.com

About Tata Consultancy Services Ltd (TCS)
Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India’s largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

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