# IDC MarketScape: Worldwide Retail AI-Driven Assortment Planning Solutions 2025 Vendor Assessment
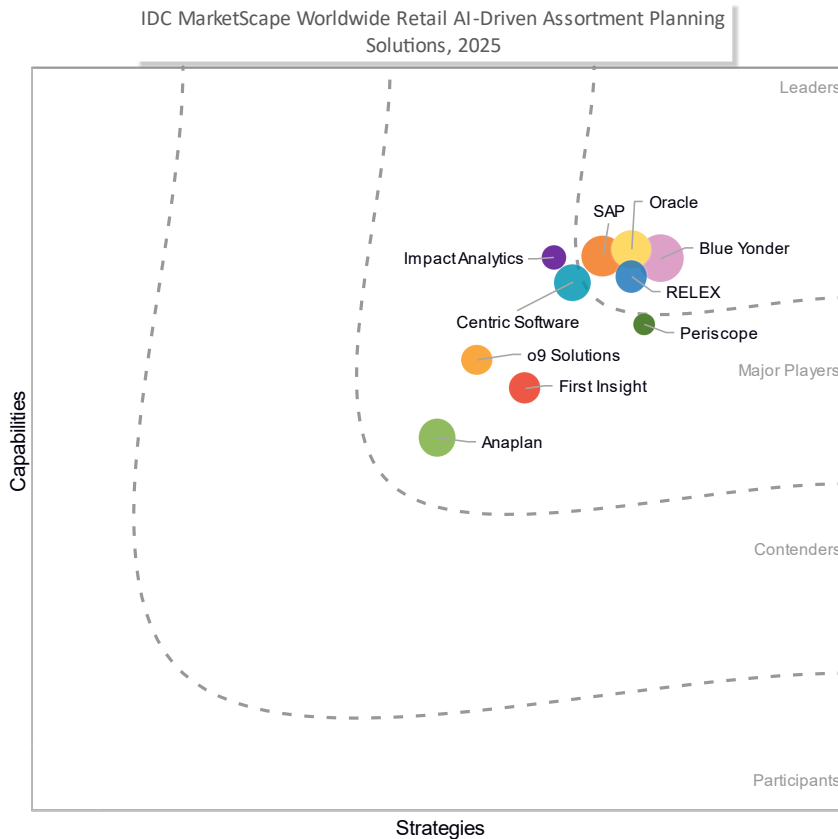
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## THIS IDC MARKETSCAPE EXCERPT FEATURES ORACLE AS A LEADER

## IDC MARKETSCAPE FIGURE

### FIGURE 1

**IDC MarketScape Worldwide Retail AI-Driven Assortment Planning Solutions Vendor Assessment**



IDC MarketScape Worldwide Retail AI-Driven Assortment Planning Solutions, 2025

Source: IDC, 2025

See the Appendix for detailed methodology, market definition, and scoring criteria.

## ABOUT THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Retail AI-Driven Assortment Planning Solutions 2025 Vendor Assessment (Doc #US52038124).

## IDC OPINION

IDC examines assortment planning (AP) in this IDC MarketScape across a highly mature field of organizations that now have introduced new capabilities through the ascent of artificial intelligence (AI) in modern tools and systems. Specifically, merchandising frontiers and functions are part of the overall planning process, and assortment planning is an integral part of the infrastructure retailers' need to operationalize their businesses. AP goes hand in hand with pricing, promotions, buying, marketing, store operations, procurement, sourcing, retail strategy, and more. All of which become inputs for planning assortments to fit a retail business. AP has been developed with unique styles and ways to build investing in a variety of retail verticals and millions of product combinations. Assortment planning at its functional level is the ability to select and allocate the right products to sell. To do this well, a product must fit with customer needs as much as with a retailer's desire to sell. The tie-in and fit with both the customer and the retailer is critical. Retailers have traditionally bucketed assortment planning, at their core, into a strategic set of steps to select products and allocate or distribute these products across the retailers' operational facilities. The objectives of AP are business focused, maximizing revenue, profitability, or specific strategic goals. Some AP is already predefined for the retailer by the market vertical it operates in, for instance, a grocery wouldn't focus on selling auto parts — though it might have an aisle with motor oil or tools. However, AP is not just about the range of products to sell, but the ecosystem of products, integration of products, and the consumer, as well as retailer interests in driving business goals. Selling advertising space in a video game might generate far greater margins than shipping, managing, and selling products on a shelf or rack. Retailers, however, are merchandisers, and their businesses are guided by not only profitability but also the nature of their retail vertical. We'll explore what the key factors affecting modern AP systems are and how the advent of AI and data is shifting the balance — including where top AP solutions are succeeding.

# More Science, Less Art

As we all know, the market is becoming more and more inundated with data. Product data is no latecomer to this match. The typical grocer today runs a product catalog of over 100,000 stock keeping units (SKUs) with even more variants and a broad range of

products. Range of products for a fashion retailer might be a few numbers of products, but new attributes describe these products from colors and sizes to frills and hem styles. The amount of data must then map to large chains of thousands of stores, each with different formats, different consumer demographics, and other conditions that affect product sales. The trend for retailers is no longer relying on merchants to decide based on a quick survey of their friend and influencer circle of the next season's hot sellers. The creativity of merchants to find the special product options through a focus group or new inspiration from their favorite showcase events is no longer the deciding factor for many retailers. Merchants seek to find ways to drive more business goals, and sometimes their bets don't pan out. Even if they are exceptional at selecting the right products, it becomes an ever more difficult challenge to determine initial quantities or even purchase allocations for a season.

The shift has been toward more scientific means of establishing purchase volume of merchandise as well as the selected merchandise to sell. Newer players like Shein and Temu are already tapping into current and future vision of what will sell, and this makes reliance on historical data a continuous competitive challenge (in certain retail verticals). Using only historical data such as sales from the previous two years to guide direction for products limits retailers' future vision. Moreover, retailers are unable to keep up with the enormity of data across products, variants, stores, items, and even at higher levels such as categories and banners. The number of combinations (without any order in how they were picked) for a basket of 20 products at a grocery store checkout aisle is over 1 million. Applied to decision trees where customers actively select in a sequence, combinations become permutations — we have over 2 quintillion options. Retail systems today use algorithms to determine the impact of purchasing based on many factors, but usually stochastic (probability-based) in nature. Many different attributes including the customer base, the local demographics, time and date, and even weather patterns influence retail systems. The ability to identify product demand is at the heart of the computation, and retailers execute this in real time when possible. Current technology solutions must incorporate computation, math, and science to truly support decision-making at retail scale. Those who cannot support decisions with data and compute power will be left wondering why their warehouses remain full and turnover is low.

## Art Intelligence Instead of Artificial Intelligence

While science is pushing hard to become the dominant force for assortment planning, there must remain a balance between the science and creative side, even if it's an uneven balance. New products come out rapidly. News travels fast, and fads are more likely and plentiful. "Black Swan" events occur — such as pandemics and supply chain fallouts. Opportunistic buyers sit on the sidelines looking for the right products, and many strategies exist to completely dominate a category. At the risk of not knowing the

market well enough, merchants must also protect against out of stocks just to make sure customers keep coming into the store. Woe to the merchant who didn't lock in a deal for Stanley Quenchers, Cozy Earth Bamboo Pajamas, Prime Energy drinks, XREAL Air 2, or AI-integrated devices for the season. Decision-making must include intelligence and support for merchant decisions to support a balanced market view — that can be historical and futuristic. This means more than just algorithms making decisions, but it also means that merchants must understand their customer, the market, and interrelation between products to establish a well-managed product range.

## Management of Assortments

The first outcome for retailers in assortment planning is in managing the assortment, specifically the initial and subsequent allocation of products to stores based on expected demand and the replenishment of items based on forecast demand combined with added purchasing including estimating the necessary budget available to purchase additional inventory where demand forecasts do not match actuals. Supply planning becomes an essential part of developing the right assortment and, in some cases, can define the composition of an assortment, especially if there are limited suppliers for specific products.

Management of assortments also ties in closely with merchandise financial planning (MFP), although these are explicitly separate in nature. Specifically in the context of variable inventories and procurement processes, assortment planning allows for better understanding of future product volumes necessary and potential budget availability to purchase stock through open to buy (OTB) to avoid stock-outs. A solid assortment management function will enable integration of such systems with existing MFP solutions as well as allocation and replenishment capabilities. Planning the assortment requires just as much thought in how well the assortment will perform in the market and time-space constraints that arise with the assortment.

Managing the assortment includes integration with space planning as well and, more to the point, execution of the assortment across the myriad of stores, various store formats, and uniqueness of the stores from both a macrospace planning (which stores for product placement) perspective and a planogramming (where in the store for product placement) perspective. Systems must be integrable with existing planogramming tools when selecting assortments and assortment combinations on a store-by-store basis or at least a clustered store view to reduce the complexity for retailers. These needs lead to optimization of assortments as a key facility for strong assortment planning.

# Optimization of Assortments

While the mainstream view for AP in retail has traditionally been in managing volumes, replenishment, allocation to stores, and developing open-to-buy considerations, there is a significant aspect of AP associated with optimization of the assortment to drive strategic value. Optimization is prioritization and selection of specific assortment combinations to achieve a specific outcome. The outcome is frequently profitability. Retailers can optimize assortments at highly granular levels within a product hierarchy but is usually related to a store-item combination. An example of granularity is shown in Figure 2.

**FIGURE 2**

**Product Granularity**

| Business |
|---|
| Banner |
| Division |
| Department |
| Store |
| Category |
| Subcategory |
| Class |
| Product line |
| Product type |
| Brand |
| Product |
| Item/SKU |
| Attributes |

| Attributes (common) |
|---|
| Size |
| Color |
| Style |
| Material |

- Well-known fashion retailer
- Men's
- Store #123
- Men's clothing
- Accessories
- Men's neckties
- Silk necktie
- Brand: Well-known brand (WKB)
- WKB – PowerTie Series
- SKU#891040
- Attributes:
  - Style: Striped
  - Color: Blue/silver

Source: IDC, 2025

Optimization is also associated with SKU rationalization, the strategic prioritization of products, based on outcomes, but extends beyond in many ways. Integration with existing planogramming for instance, space availability in stores, sourcing negotiation, and even product life-cycle management integration may impact applications that offer assortment optimization. Assortment management tools include varied levels of assortment optimization. This IDC MarketScape assesses a combination of capabilities for both management and optimization.

Typically, optimization establishes the most effective outcomes for specific strategic objectives. This might include profitability, revenue, sell-through, or other strategies the retailer is seeking to push using their assortment planning capabilities. The advantage is strategic when applying optimization to assortment planning.

## Market Analysis

While assortment planning has been inherent to retail for centuries, some factors are notable in today's market conditions because our solutions are now able to handle higher volumes of data. These factors affect the performance of the solutions retailers are employing to tackle AI-driven assortment planning. The advent of AI has also shifted the importance of these factors, including cycles, outcomes, and modern data-driven factors.

### The Myth of Cycles

One generalization that has also permeated the AP space is the concept of short- and long-cycle products. Retailers typically consider short-cycle products to have fast turnover and usually associated with electronics, fast fashion, and seasonality. Long-cycle products last longer on the shelves and racks, can sell most of the year, and are regular staple products, and sometimes core products for retailers. These may include groceries, essentials, or general merchandise. Too often AP tools attempt to capitalize on either short- or long-cycle products at the sacrifice of the other. The challenge for retailers is that most do not have only short- or long-cycle products. Even the discount fast fashion store has specific products that may be evergreen or consistent sellers, and even if not the same exact product, similar products are sold from year to year. Similarly, long-cycle product stores such as a grocer would maintain seasonal and holiday items that are expected to have fast turnover and need to be managed. While it is great to consider product types separately, the retailer doesn't have the luxury to purchase and use two separate solutions to manage short- versus long-cycles products. Unfortunately, some reviewers support looking at these product sets separately and this is misguided. The best solutions will be able to manage both simultaneously and will manage to the specific product need at hand. Merchants will seek out the most effective solutions, and that means multiple solutions to manage their long and short product sets just won't be preferred.

## Outcomes

Retailers design assortment planning to drive outcomes. This includes management and optimization of assortments. In most cases, outcomes translate into improved revenue or profitability. In this context, it is important to consider how AP delivers outcomes. Effective AP will:

- Reduce inventory holding costs
- Increase turnover and speed up product throughput
- Increase profitability by selling at higher margins
- Increase profitability by increasing space efficiencies
- Improve customer satisfaction, relationships, and loyalty
- Simplify procurement arrangements and enable better volume negotiations

# Modern Assortment Planning

Modern assortment management and optimization tools now deal with a variety of factors that change how retailers can think about assortments. Some of the concepts mentioned in the sections that follow have become increasingly part of the discussion on assortment planning.

## Attributes

Retail products now have numerous characteristics that define them. Products stored in a product information management (PIM) system or similar may have dozens if not hundreds of related attributes that establish exactly what the product is. An example might be a laptop computer that has attributes such as product hierarchy, product image, unit size, packaging, packaging space, transport restrictions, battery life, monitor size, haptic-touch capabilities, USB ports, memory size, embedded Bluetooth, biometric log-in, included GPU, microprocessor set and quantity, software compatibility, sound system, sustainability, branding and, lest we forget, artificial intelligence capabilities. The attributes can establish attribute-customer relationships and other factors to help establish demand, demand transference, customer decision-making indices, market value, and even price point to sell at. With AI capabilities, the attributes become a powerful representation of the product and can be used for broader-scale comparisons with other products as well, especially when similar in nature. Modern assortment management tools can leverage attributes within their solutions to simplify comparative product options, SKU rationalization, optimization of product space, market demand at the store or store cluster level based on store demographics, and more.

# Customer Decision Trees

The hierarchy of merchandise matters. Every consumer engages in purchasing through a set of decisions. When walking into a department store, areas of the store are labeled with categories — Electronics, Women's, Men's, Home Décor, and so forth. Grocery stores label each aisle with the products consumers can buy — who hasn't zoomed over to the Candy aisle when they were younger? Online, the navigation experience is similar, with specific fashion selection groupings on category pages that offer a catalog of products within the category. The navigation experience combines with online search and filter capabilities allowing navigation across an entire site map or hierarchical decision tree. For specific product types, ecommerce sites drive customer decisions through what were formerly termed *wizards* that allowed users to make sequential hierarchical decisions to arrive at a product selection point. While customer decision trees (CDTs) are not the only way consumers purchase or make a decision to buy or not, planners can leverage decision trees to better understand options that consumers face and attributes that consumers care about.

Figure 3 shows the decisions customers are making and which particular aspects of the product (in this case, donuts or danishes) the customer is selecting from and the characteristics of the product at the decision stage, such as flavor or style. The method is effective for identifying which attributes customers care about as well as how a product should be configured. However, CDTs have not been effective in gap analysis and identifying where new products might need to fit.

**FIGURE 3**

**Customer Decision Trees**
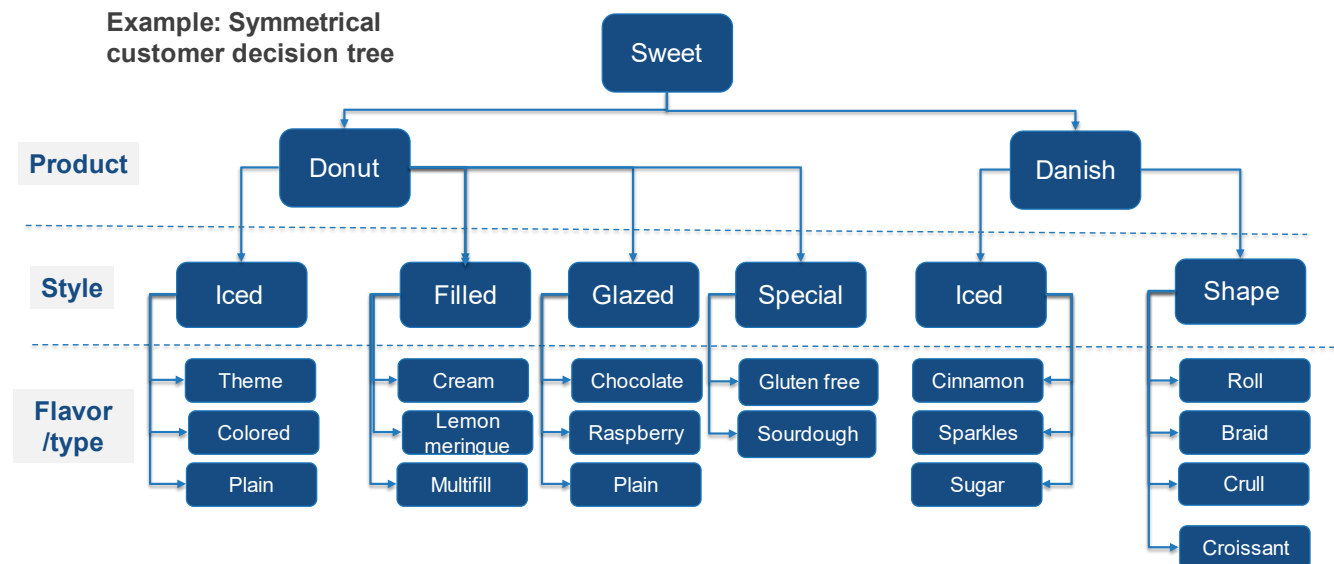


Source: IDC, 2025

## Store Clustering

Assortment planning requires store clustering to effectively localize assortments to specific stores or groups of stores. Almost all retail chains have different store types in their mix. Stores are differentiated by location, and there are few store chains that are able to maintain a consistent, fixed layout across all of their stores. In addition, even for retail brands seeking similar demographics for their real estate when launching new stores, many are reliant on local communities and environments that are constantly encountering an ebb and flow across many different consumer groups. Over time, a chain may consist of highly differentiated stores with differentiated layouts and quite different customer bases. Combine that with geographic regions, climate differences, and cultural differences and there are few retailers that can boast the same store concepts across the board. Retailers, however, do have the option of developing groups or cohorts of stores as clusters that have similar characteristics in selling, performance, demographics, or other factors. Same store comparable sales are a common term for retailers and enable brands to cluster comparable stores to determine the actual changes in store performance over time and make decisions to improve stores, open new ones, or even close stores. How does store clustering affect assortment? One of the key factors for differentiated retail stores is the ability to sell to the specific local community and customer demographics. This includes climate, culture, geography, consumer affluence, and product preferences. The ability for assortment planning tools to enhance, improve, or define how stores can be clustered allows for more effective assortment planning. Certain tools today can automate the clustering process and preselect stores and store groups with specific assortments as part of the assortment planning process; others can automate based on specific products for differentiated product strategies on a clustered store group basis. Some tools can go further to the individual store, but these efforts become encumbering when applied to hundreds or thousands of stores, even when integrated with other supply chain and planning systems.

## Demand Transference

Demand transference is the amount of demand that is transferred from a product and where the demand is transferred when new products are added or removed from an assortment. Demand transference must consider substitution variety as well as competitive loss when establishing what happens to a product over time. While demand transference is an effective tool for optimizing a product assortment, most demand transference tools are not foolproof. An inherent challenge is the assumption that product demand remains fixed. Even for slow-moving products, substitution demand can change as well as overall product demand. Other factors include the demand correlation with similar products, a donut will likely be more inclined to be replaced by a candy bar than a wrench, where a candy bar is a consumable snack as is

the donut. This means the product would need to be equivalent and models would need to consider all the products in a portfolio. Other demand transference issues may include category limitations, missing on non-category substitution and transfer of demand across categories. Another factor can be external, coming from substitution effects outside the retailer. This can include competitors or other substitutions. For instance, introducing bottled water, even at cost, at your retail store might not be valuable when the government is giving out free bottled water. A strong influence on demand transference are price points and optimization of pricing. While demand transference has its challenges, there are instances where such models provide a reasonable estimation of effects when assortment portfolio changes are introduced. The effective demand predictions can be accurate in cases with stable historical product data, understanding of current demand, and reliable forecasting that considers many parameters. For retailers, however, the trade-off of building and managing demand transference is between complexity and performance gains. Sometimes the gains don't justify the increased complexity.

## Gap Analysis

Assortment planning introduces tremendous value to an organization, but it can be confusing for many — especially as AP ties primarily to products offered and doesn't consider what happens when replacement products are offered. The metrics necessary to establish what should be sold can vary distinctly from what is available on the shelves. Critical to AP is gap analysis, and sometimes category managers overlook gap analysis entirely, especially when their believe they have covered all the bases with respect to a product. Most AP tools are unable to establish new product sets for bridging the missing product item from their portfolios. Instead, these tools work with the data set already available to find a substitute product.

## Workflow

Assortment tools must enable easy-to-master workflows in retail settings. This is especially true when applied in a centralized fashion and then distributed across large sets of stores. While some assortment tools provide localization and automated workflows that allow store managers or regional planners to influence and engage with product assortment adjustments, the workflow process is essential when establishing allocation of critical products for a store. This usually means multilevel approvals, override capabilities, and localized allocation of product based on local constraints. It makes no sense for a centralized planner to dictate that store number 3 should receive 500 additional rolls of toilet paper when the store already has a backlog of inventory cluttering up its stockroom. Such efforts in assortment planning directly affect capacity planning and localized pricing, and the latest tools are applying AI to support visualization of planograms, coplacement of specific products based on store layouts and consumer demand constraints, and management of transport and warehousing

requirements through integrated solutions that leverage assortment planning in conjunction with demand forecasting.

## Volume, Quantity, and Pack Decisions

Retailers expect modern assortment tools to identify the right products to buy at the right time, but a centralized instruction communicated to a store manager that has no room on their shelves will leave the new products sitting in their stockroom until the next cycle, effectively overstocking and unable to move product, translating into higher operating costs and lower efficiency. Assortment tools use volume as the first key constraint associated with store cohorts or clusters that have similar store layouts and stocking options. In addition to volume of product, these tools are prescribing the quantity that stores will need to reach and meet expected demand for specific products over weekly, monthly, or quarterly time frames. In addition, assortment tools are also preparing how to define and determine the appropriate packing decisions for products to sell quickly and encourage turnover. This may come in unit sizes, packaged bundles, or even the type of packaging used such as cardboard boxes rather than plastic bags for selling. The ability for these tools to deliver on these parameters are nothing short of magical, but most of these are not fully automated. Certainly, most of these efforts require tremendous heavy lifting up front in configuring, activating, and building the correlative matrices across products to make them worthwhile. The downside is that the matrices are highly pernicious, and assortment tools may require continual updates as demand shifts volume and quantity availabilities as well as preferred packing requirements.

## Automating Allocation

Allocation is a key functionality of many assortment tools and part of the management of retail assortments in general. Allocation is effectively the quantity or volume of product for each product delivered to each selling site (and to supply or distribution centers) usually at the beginning of a season. Allocations may be offset by additional reserved volumes of product available to the retailer based on sourcing deals and variable or sometimes fixed price points to buy additional inventory for delivery at later times to accommodate higher demand than expected. Allocation usually requires accurate demand forecasting otherwise there would be an excessive amount of overstocks or out of stocks for a retailer. The ability to automate allocation, especially based on localized parameters, offers effective ways of distributing product through open-to-buy measures or selling on contingency, where product can be returned.

Several types of allocation methods exist, from basic past historical data defining how much product stores will receive to clustered localized allocations driven by demand forecasting, historical demand, or updated customer survey. The key to modern assortment planning in the context of allocation is automation. Across hundreds or

thousands of stores and thousands of products, it becomes a nightmare to manage such capability through manual updating of products. While possible across select or key value items (KVIs), it leads to resource fatigue. The assortment tools that can automate this process are the best. Such solutions use AI/ML capabilities to deliver allocation volumes and quantities and then integrate the data with existing delivery tools to ensure compliance where enforcement of allocations to stores are carried out.

## New Product Introductions

The introduction of new products is always an inherent challenge for assortments because the new product modifies the choice set for a consumer in the store. Where a consumer may have chosen from three options, they now have four. In addition, the new product adds complexity to space and capacity, including questions on how and where a retailer would place it, such as proximity to other products. It might make little sense to place a new cereal brand next to produce, but it might make sense to place it next to other cereals or near dairy. Assortment planning tools can uncover many of these correlative relationships, especially if they translate into direct demand influence. While capabilities such as demand transfer can play a part, the product impact will usually be through some form of demand forecasting, and many methods exist for that. The important item of note is that new products introduce disruptions to the product portfolio, and for certain industries, such as fast fashion, new products are introduced regularly in high frequency. For verticals such as grocery, a new product introduction usually has gone through a series of negotiations, maybe trade promotions contract, and modification of terms of contract before they're introduced on the sales floor. There is a change in demand across all products on the shelf, but these can be managed more closely and addressed through automated tools. The main issues occur when assortments vary by region, cluster, or store, where comparative assortments may change and new products are introduced in different ways and at different times in different locations. These disruptions can translate into much larger impacts on specific assortments within specified stores, but the larger impact is adjustment to existing allocation of other products due to demand transference, especially if a product has high demand in the local market. Suddenly there is high demand for a new product with no inventory allocation and limited demand for products already on the shelf with a backlog of quantity in the stockroom. Smart retailers will plan these types of assortment changes ahead of time, in concert with sourcing, and accommodate them through OTB or contingency buying, especially in markets based on trends or faster-moving products.

# IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

Vendors must comply with the following inclusion requirements to be considered for evaluation in this document:

- Delivers an established (client base) enterprise-grade solution in B2C retail assortment planning, assortment management, or assortment optimization
- Caters to multiple retail clients with $500+ million in annual revenue (client)
- Has artificial intelligence algorithm components built-in or as an add-on capability to support assortment planning or a specific feature extension that includes AI (This criteria requires that AI is used to support not necessarily supplant the assortment planning capabilities.)
- Includes some level of scenario planning capabilities to test and validate different circumstances, parameters, or changes in market conditions and does not operate solely as a monitoring tool
- Can support tier 1 retailers at global scale across ecommerce, store, and other channels
- Established software/solutions vendor with prominent/visible market presence
- Owns or licenses intellectual property for assortment planning solutions — can be developed in-house or via transaction

# ADVICE FOR TECHNOLOGY BUYERS

For tech buyers, assortment planning has become a new opportunity to streamline operations as well as manage and optimize existing goods for sale. Assortment planning is both art and science where creativity and data play an important part in the development of the right product options to sell while avoiding drowning in a sea of mediocrity. Following are some considerations to keep in mind as you search for the right solutions to support assortment planning across the board. The 5–10% lift in lower costs or increased revenue drives straight to your bottom line.

- **Selection and allocation:** For retailers, selection of product must remain a competency and cannot be wholly outsourced. Technology must be a support tool to help develop scenario planning, understand the impact of other products in the market, and navigate product sourcing and availability rather than a mindless automaton running in the background, supposedly improving your assortment. The best tools will offer you the data needed to understand how new product introductions, removing products and adjusting allocation will impact your business. Ensure that you put in place mechanisms to validate the

effectiveness of these tools, and rely on more than self-monitoring tools from the AP solutions.

- **Competitive products:** You will need to consider competitive products with those in your portfolio, especially if you have a broad product set with overlapping categories and classes. Most markets offer competitive products that directly compete with your internal product lines, your private label selection, and your store branded products. Reliance on demand forecasting tools can be counterproductive, especially when competitors operate on their own timelines and schedules for the products they introduce and modify in their assortments. While it is challenging to capture all data from your competitors, you should be able to address current key products that competitors are selling, substitution options that your competitors may likely use to fill gaps, and overlaps of products within your own competitive product sets. This assumes you can clearly identify your key competitors in the first place. The tools you review should have some of these capabilities, but most are not equipped for holistic market views in real time. Sourcing, buying, and procurement functions follow that can distinctly affect market perception so a realistic internal and external view of competitive products, especially across your core products will be an important pre-assortment planning stage. Don't shirk this responsibility of analyzing the market.

- **Integrated data:** Most assortment planning tools, when based on demand metrics and demand transference, will have high dependency on collected data. There is a constant ongoing flux in the market with continual change in market demands, customer demographics, data sampling, fashion trends, and seasonal impacts to consider. In addition, consumer data, product data, and operational data may reside in a different location within your organization, but all are needed to make good decisions on assortment. Integrating accessibility and usage of the many data sources will be a significant advantage over attempting to manage or optimize assortments through separate data access points. Evaluate tools with a holistic view of your data sources and consider the ease (or difficulty) with which your tools can work with your current data structures. Plan ahead to manage data integration.

- **Strategic targets:** It is critical that your assortment planning efforts coincides with your organization's strategic targets, effectively co-opting these targets as inherent targets for your AP tools. This means targeting revenue may not be your key or only goal for a season. Instead, clearing out inventory, closing on higher margin products, operational sales efficiency, or customer satisfaction may need to drive your assortment planning effort. Ensure that your AP partner selection can specifically manage to your needs without excessive reconfiguration or customization. Your business targets should be your AP targets.

# VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

## Oracle

After thorough evaluation of the strategies and capabilities of Oracle, IDC has positioned the company in the Leaders category for this 2025 IDC MarketScape for retail AI-driven assortment planning solutions.

Oracle, headquartered in Austin, Texas, is a publicly traded company founded in 1977. The company has a long history in retail including major acquisitions across merchandising, commerce, and retail including well-known retail operations and planning companies like Retek, Datanomic, Endeca, and Micros, to name a few. The Oracle retail platform offers a full end-to-end suite of solutions across retail planning, optimization, and execution applications including assortment planning.

Oracle's assortment planning solution capabilities are part of Oracle's overall suite for retail with underlying Retail Models, Data, and Analytics. Oracle operates with an Embedded AI set of services plus a basic infrastructure to support the overall platform and retail-specific cloud services that address the retailer's journey from planning to fulfilment and replenishment. The Oracle Assortment journey is highly integrated with pricing, promotions, markdowns, across preseason, in-season, and next-season perspectives. The tool is well designed for merchants and allows for a relatively straightforward transition with excellent visualization of products and category management and optimization.

Quick facts about Oracle include:

- **Employees:** 164,000 employees (total), undisclosed amount as part of the Retail Global Industry Unit (RGIU), but IDC estimates ~2,000 employees
- **Global footprint:** Operations worldwide
- **Tenure:** 20+ years of operation for Oracle's retail business
- **Retail focus:** The RGIU is 100% retail focused, with concentration in fashion/softlines/specialty, hardlines, and grocery/CPG for its Assortment Planning solutions.
- **Sample AI-driven capability:** Oracle Retail Assortment Planning includes an AI-driven forecasting engine, AI-based customer segmentation, advanced clustering, and demand transference capabilities.

- **Customer snapshot:** Oracle's customers operate in the midenterprise tiers, with revenue ranging from $100 million to $10+ billion.
- **Key assortment planning product:** Oracle Retail Assortment Planning and Oracle AI Foundation
- **R&D:** Oracle invests in the higher end of R&D in the industry.

## Strengths

- **SKU prioritization to help determine what needs to change first:** Oracle has worked closely with customers to build SKU-store-level prioritization and helps retailers "quartile" their SKUs into those that would need the most attention. The company is able to support establishing minimums through system recommendations. Oracle ensures that retailers can identify the minimum quantity allocations by store for top products. Retailers can better understand overall market analytics and the impacts of cannibalization effectively.
- **Active results in cost savings, especially in reducing inventory, buying, and macrospace planning:** The assortment planning solution helps retailers with reducing inventory investment, including reduced overall capital costs. Retail merchants can have more confidence in the products they're selecting and quantities purchased as well as positively impact sales, margin, and turnover. By using product attribute–driven data points, Oracle enables macrospace planning capabilities by identifying linear footage needed (capacity) by store for the products selected. Retailers are able to review their assortments with explicit reduction in assortment and improved turnover.
- **Strong partnership in developing new assortment optimization methods:** Oracle's partnership has been deep and includes training and engagement with customers as well as defining and building the ongoing product road map. Working with the retail labs team, retailers are able to apply new methods to optimize their assortments, such as prioritization tiers, customer decision trees, and demand transference.

## Challenges

- **Validating longer-term requirements when introducing new tech:** For some customers, Oracle offers too much, too quickly in terms of tool capabilities. Retail teams can absorb a fixed amount of new technologies quickly, but this becomes more difficult with widespread transformations where multiple products are being introduced at once. During this time frame, Oracle is challenged with ensuring that configurations and customization meet long-term retailer needs, which the company hasn't figured out for itself as of yet and is unable to validate.
- **Managing channels from one point:** Channel management can become a channel issue. While Oracle does enable omni-channel management and

optimization of assortments, retailers may be operating in different arenas per channel with limited overlap, even after deploying Oracle's assortment tools. Maintaining the silos can be costly to the retailer, and not integrating data sets can result in skewed system capabilities by channel. For instance, a retailer may be able to manage in-store assortment operations but be challenged to have visibility or strong ecommerce assortment optimization at the same time.

## Consider Oracle When

- The retailer is seeking strong service and deep technical and operational partnership to build a solid assortment management and optimization system. The ability to leverage many forms of assortment optimization offers an edge in the market.
- The retailer is looking for active cost savings with explicit returns on spending that will improve revenue, margins, profitability, turnover, and customer experience. Oracle's solution is a reliable tool to deliver results, especially for turnover and macrospace planning overlays.

## APPENDIX

## Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the estimated or computed market share based on revenue, customer count, customer brand presence, and customer revenue of each individual vendor within the specific market segment being assessed.

An IDC MarketScape reaches many readers, including potential customers, experts, and investors. An IDC MarketScape assessment evaluates companies relatively using fixed criteria that an industry analyst sets across solution capabilities and strategic objectives. The exposure of the document is wide. Readers use the document to outline the state and direction of the companies evaluated, including their strengths and challenges. Companies with a strong presence in the field participate to influence the assessment. Companies that do not participate but maintain a substantial presence in the proposed market are evaluated based on internal interviews and publicly available information. There are limited costs except for information sharing through RFIs, the time required for briefing, and interviews with active referenced customers. However, companies do have the option to license excerpts or the document. IDC commands enormous attention from various CIO and CMO communities and Wall Street financial decision-makers. These highly regarded documents influence decision-making at the highest levels

## IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior and capability.

## Market Definition

Assortment planning (AP) solutions are software and cloud-based tools that enable an effective process to define the products, product variants, and strategy to sell merchandise aligned with a retailer's market strategy. Assortment planning tools must consider market timing, customer analytics and insight, and forecasting to meet strategic corporate objectives such as profitability or seasonal sell-through. AP tools may include inventory management and optimization capabilities, but this would not be a required function. AI-driven assortment planning leverages artificial intelligence algorithms to assist the process of forecasting and understanding how market factors will impact retail sales. These overlaid capabilities enable AP tools to drive toward strategic goals more easily and in an automated manner, especially for large assortment sets for a retailer. This IDC MarketScape will focus on retail-specific AI-driven AP solutions that offer automated ways to manage large sets of assortments

and clustering while leveraging retail customer analytics, forecasting, simulations and scenario planning. The IDC MarketScape will address vendors worldwide with specific AI capabilities catering primarily to the retail industry. For the purposes of this IDC MarketScape, assortment planning solutions that include management of assortments, allocation, replenishment, inventory management, supplier procurement, selection, planning, open-to-buy financial planning, optimization, and store-based options will be considered part of the assortment planning processes.

## LEARN MORE

## Related Research

- *IDC MarketScape: Worldwide Retail, Footwear, and Apparel PLM 2024 Vendor Assessment* (IDC #US51795224, December 2024)
- *IDC MarketScape: Worldwide Supply Chain Planning for Life Sciences Industries 2024 Vendor Assessment* (IDC #US51047123, November 2024)
- *IDC FutureScape: Worldwide Retail 2025 Predictions* (IDC #US51558524, October 2024)
- *Blue Yonder ICON: Engineering-Centric Strategy with Unified Supply Chain Vision* (IDC #US52477624, August 2024)
- *The Shoptalk Bridge for Retail Technology 2024* (IDC #US52322022, June 2024)
- *Blue Yonder ICON: Taking the 250-Year View on Supply Chains* (IDC #US50833823, July 2023)
- *IDC PlanScape: Intelligent Retail Assortment Planning* (IDC #US47779422, December 2022)
- *IDC MarketScape: Worldwide Supply Chain Supply Planning 2022 Vendor Assessment* (IDC #US47620822, September 2022)
- *Retail Strategies for Sustainability Through the Lens of Product Development and Life-Cycle Management* (IDC #US49054122, May 2022)

## Synopsis

The IDC study evaluates the landscape of retail AI-driven assortment planning solutions for 2025, highlighting the integration of AI in modern tools to enhance assortment planning. It emphasizes the shift from traditional methods to data-driven approaches, the importance of balancing scientific and creative aspects, and the role of AI in optimizing product selection, allocation, and replenishment. The document assesses various vendors, their strengths, challenges, and suitability for different retail needs, providing insights for technology buyers to make informed decisions. Assortment

planning will be a next-generation competitive advantage, and retailers who embrace it will be light years ahead of the competition.

"Next-generation retail assortment planning will be mastered by creative scientists and scientific artists. With AI as a copilot, assortment planning will continue to become easier and we will see retailers leverage the enormous amounts of collected data into meaningful financial outcomes," says Ananda "Andy" Chakravarty, VP of research, IDC Retail Insights.

## ABOUT IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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