

SPARK Matrix™ : Retail Forecasting & Replenishment, Q4 2025

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Key Findings

Following are the key findings of the QKS Group's 'SPARK Matrix Retail Forecasting & Replenishment, 2025 research:

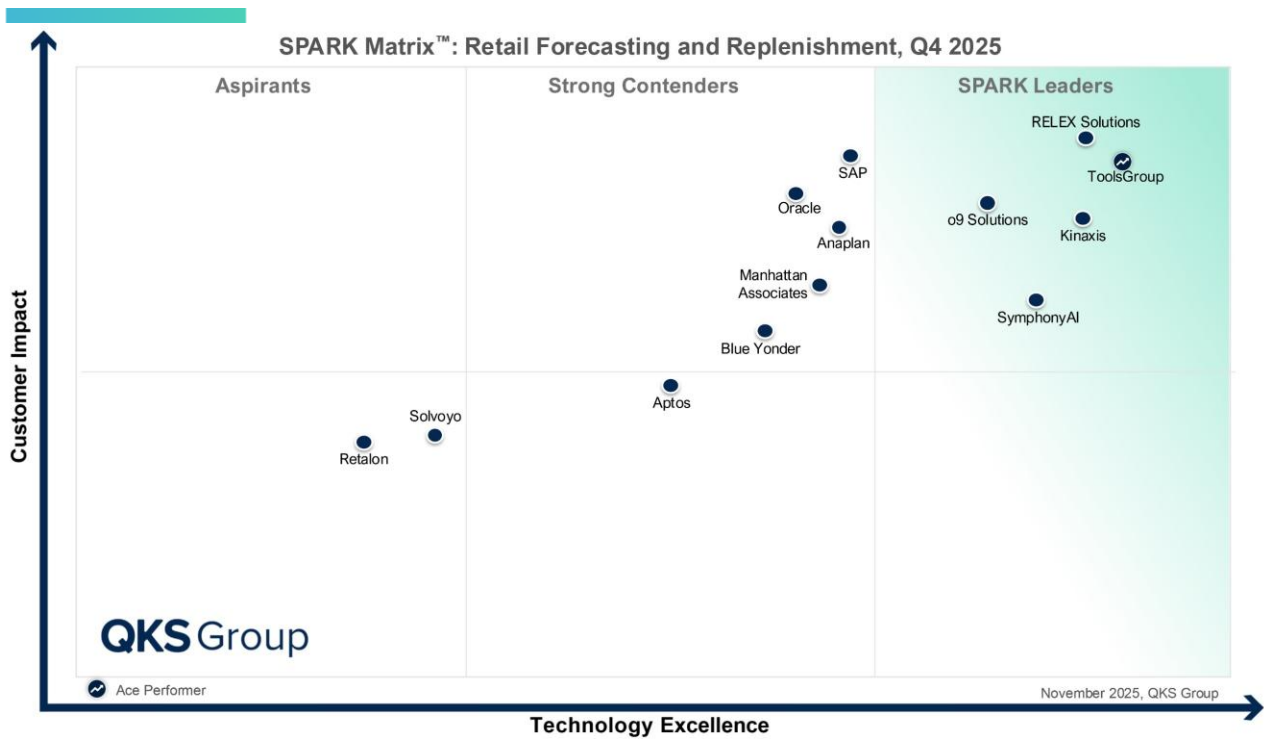
- **Market Growth and Demand Drivers:** The Retail Forecasting and Replenishment (RF&R) industry has been experiencing rapid expansion due to increasingly complex retail realities, omnichannel fulfillment, and shorter product life cycles. Retailers are seeking ways to find a balance between availability and cost while navigating volatile demand, supply chain disruptions, and rising consumer expectations. The more durable and fluid inventory approaches of the pre-pandemic era can now move in tandem with the post-pandemic dynamics of retail, accelerating the development of intelligent forecasting and automated replenishment solutions. Verticals like grocery, fashion, electronics, and general merchandise have all been drawing investment into RF&R solutions to avoid stockouts, offset markdowns, and deliver a better customer experience.
- **Technology Adoption Trends:** AI and Machine Learning drive foundational RF&R solutions today, focusing on demand sensing, anomalous detection, and adjusting forecasts in real-time. Retailers are also increasingly using advanced analytics to personalize demand drivers by channel, geography, and customer type. Cloud native platforms have emerged as the organizational standard, given that they provide scalability and a seamless integration of data across merchandising, planning, and the point of sale (POS). Intelligent automation allows for autonomous replenishment by dynamically adjusting replenishment orders informed by demand variability, supply chain restrictions, and inventory position. Microservices and API-first architectures are also enabling modular implementation and less time for integration with ERP and OMS systems.

- Vendor Landscape & Differentiation:** Vendors in the RF&R space are offering industry-specific solutions, such as fashion lifecycle planning, CPG demand models, and grocery freshness optimization. Leading platforms are offering end-to-end inventory planning, including forecasting, allocation, and section replenishment, all in one module. Depending on the vendor, differentiators can consist of embedded demand intelligence or ingesting near real-time point of sale (POS) data and differentiating by enhancing the use of external drivers like weather, social signals, and promotions. Some vendors are focused solely on forecasting by providing a low-code configuration, dashboards that offer intuitive analysis, and automated insights for planners, while others are focused on deep vertical integration with retail execution tools.
- Data Quality & Demand Signal Integration:** Forecasting is only effective when it is on time, granular, and cleansed data. To handle the de-siloed and inconsistent nature of internal and external data, vendors are employing AI-powered data cleansing and data normalization tools to cleanse and normalize data before ingestion. Leading RF&R solutions provide integrated demand signals like sales, promotions, returns, weather, web traffic, loyalty, and create unique unified demand forecasts, while real-time data running through the most reliable forecasting, allocation, and replenishment platforms will ensure refill based on the most recent consumer behavior patterns. The evolving importance of demand signal accuracy is motivating retailers to invest in data governance models, ensuring master data is aligned across planning and execution systems.
- Omnichannel and Store-level Intelligence:** Forecasting and replenishment are shifting from SKU/DC-centric models to location-aware, channel-specific, and fulfillment mode-specific models. Systems are now optimizing for individual stores, micro-fulfillment centers, and dark stores. They are integrating data regarding store traffic patterns, sales velocity, return rates, and digital behavior. Algorithms account for distinguishable replenishment strategies for buy-online-pickup-in-store (BOPIS), ship-from-store, and traditional shelf sales. This hyper-localized approach assists retailers with maximizing reductions in overstocks and operationalizing stockouts, all while supporting product availability in geo-targeted time frames in the right place.
- Sustainability and Waste Reduction:** Sustainable practices in the supply chain are emerging as their own KPI within replenishment optimization. Vendors are embedding these features to reduce spoiling and waste, reduce overruns, and optimize footprints to deliver to the consumer. In grocery and apparel verticals, replenishment solutions continue to evolve and, more recently, began utilizing expiration-aware forecasting, along with other green delivery constraints, to confirm ESG objectives.
- Planner Enablement and User Experience:** As forecasting becomes more complex, being able to empower the human planner becomes more important than ever. Many of the leading solutions in the space are using natural language interfaces, GenAI copilots, no-code customizations, and exception-based workflows in order to reduce cognitive load and improve productivity. Also, dynamic visuals and KPI dashboards allow for better and quicker decision-making.

- **Platform Integration & Ecosystem Synergy:** RF&R systems are no longer standalone tools. Integration with order management systems (OMS), warehouse management systems (WMS), promotion planning, and supplier collaboration solutions has become essential. API-first architectures and headless planning capabilities allow for real-time orchestration across the upstream and downstream processes. This convergence provides end-to-end visibility and faster execution of demand-driven decisions, from promotion to shelf to reorder.

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Figure: 2025 SPARK Matrix™: (Strategic Performance Assessment and Ranking) Retail Forecasting & Replenishment



Vendor Profile



The following vendor profiles have been written based on the information provided by the vendors' executives as part of the research process. The QKS research team has also referred to the respective company's website, whitepapers, blogs, and other sources for writing the profile. A detailed vendor profile and analysis of all the vendors, along with various competitive scenarios, are available as a custom research deliverable to our clients. Users are advised to directly speak to respective vendors for a more comprehensive understanding of their technology capabilities. Users are advised to consult QKS Group before making any purchase decisions regarding Retail Forecasting & Replenishment solution and vendor selection based on research findings included in this research service.

Anaplan

Founded in 2006 in Yorkshire, England, and now headquartered in Miami, Florida, USA, Anaplan is a cloud-native enterprise planning platform provider. The company is known for its Connected Planning approach, helping enterprises link operational and strategic decisions across business domains through a unified modeling engine. Its proprietary Hyperblock® technology enables real-time, in-memory calculations for large-scale, multi-dimensional data models across departments like supply chain, finance, sales, and operations.

Anaplan provides Retail Demand Forecasting and Replenishment capabilities, which are part of its Supply Chain Planning suite. This includes configurable applications for demand forecasting, demand sensing, inventory target setting, and supply-demand balancing offered as modular planning apps or customized use cases on the Anaplan platform. All of this functionality is embedded in Anaplan's composable architecture, delivered via SaaS, and allows access to a shared modelling space for scenario modelling, collaboration, and analytics. Anaplan supports global customers in apparel, luxury, groceries, home goods, and general merchandise. As these companies adopt their platforms, it is well-positioned to help retailers seeking to move from disconnected spreadsheets and legacy planning tools to an agile, collaborative, and analytics-driven process.

Strengths

- Anaplan provides multi-level demand forecasting in a configurable modeling environment. The retailer can forecast by aggregating SKU/store/channel while using prebuilt algorithms or custom logic in all scenarios. The forecasting models can be trained on factors like seasonality, promotions, price elasticity, and even external variables like holidays or events.
- In addition, Anaplan provides real-time and near-real-time demand sensing capabilities, which allow for short-term actionable forecasting by ingesting real-time data sources relevant to the business. This assists in quickly recalibrating both short and long-term plans in response to changes in demand signals, and ultimately, improves speed of reaction throughout replenishment cycles.
- The inventory optimising logic incorporates both forward-looking safety stock and reorder point calculations, while also considering the service-level objective, lead time variability, and demand variability. This systematic process will allow the planner to proactively recalibrate the inventory but not to overstock the stores.

- The supply and demand alignment will allow for simulation of supply constraints, and can balance any forecast against the reality of production or procurements occurring. Retailers can even utilize "what-if" scenarios to evaluate the implications of certain trade-offs involving service levels and associated working capital, or fulfillment risks.
- The solution is designed to enable collaborative planning across a firm's cross-functional and cross-business activities. These can happen across operations such as demand, supply, merchandising, or finance. Because Planners are able to work off shared data models and role-based workflows, it allows supply chain planners to work collaboratively on the same version of the truth and provide localized detail.
- Anaplan's scenario planning and versioning tools are embedded within the forecasting workflow. Retailers can compare forecast versions, simulate responses to external factors, and adjust replenishment thresholds accordingly.
- Prebuilt planning apps such as Demand Planning, Store Replenishment, and Inventory Management are available on the Anaplan App Hub, reducing time-to-value for mid-sized and large retail deployments.
- Anaplan is ideal for mid-to-large multi-channel retailers looking to replace spreadsheet-based or siloed planning with a collaborative, scalable platform. It is especially relevant for organizations with cross-functional planning needs and a strong appetite for scenario-based decision-making.

Challenges

- The flexibility of the platform can result in configuration complexity. While powerful, Anaplan's modeling environment requires skilled model builders or consulting support to fully leverage the platform's potential, especially for custom workflows.
- While there are Anaplan prebuilt apps, most customers still need a custom implementation. Anaplan, in comparison to retail software, always requires consulting upfront to set up the data model and define potential planning hierarchies to meet business needs.
- The replenishment capabilities are for planning, not execution. While Anaplan makes replenishment recommendations, execution in order management, and or supply requires custom connectors or middleware to other applications.
- Change management and user onboarding are key barriers to adoption. Retail organizations without prior experience in centralized planning or cross-functional modeling may face internal resistance, especially from users used to spreadsheet-driven autonomy.

- Although Anaplan is widely adopted across industries, it has a lower brand recall in the retail planning space compared to traditional supply chain software vendors. Buyers seeking deep industry-specific case studies in fashion, grocery, or convenience segments may need direct validation through references.
- Retailers with limited in-house analytics or planning resources should evaluate carefully. Anaplan's model-driven environment requires business and IT collaboration, and organizations without internal modeling capabilities may face long-term dependency on external support.

Aptos

Founded in 1972 and headquartered in Atlanta, Georgia, Aptos is a retail technology company that focuses on unified commerce solutions. The company offers a diverse portfolio of solutions across POS, order management, merchandising, and CRM, with products tailored for the modern retail environment. Aptos powers its retail customers with its cloud-native Aptos ONE platform, which helps deliver an integrated shopping experience across stores and the web.

Aptos's retail forecasting and replenishment offering is anchored by its Allocation, Forecasting & Replenishment (AFR) solution, part of the retail merchandising suite. Industry-leading AFR facilitates integrated demand planning, inventory optimization, and creates distribution programs that enable retailers to maintain appropriate inventory levels while meeting consumer expectations. Aptos delivers AFR as a configurable application on Aptos's composable retail cloud platform, enabling omnichannel effectiveness.

In 2022, Aptos sold its planning and product lifecycle management practice to Aptean to sharpen its focus on unified commerce solutions. Aptos is being recognized for its deep retail knowledge, as well as its scalable, cloud-first solutions for the enterprise retail space.

Strengths

- Aptos's Allocation, Forecasting & Replenishment (AFR) solution is designed to tackle real-time, multi-location inventory challenges for their omnichannel retail merchants specifically. Its platform intelligently aligns forecast, safety stocks, and order policies across the entire merchandise lifecycle, while automating the forecasting, replenishment, and allocation flows throughout. For many retailers, Aptos provides a unified planning environment that enables them to allocate merchandise across sizes, manage promotional allocations, and plan their lifecycle-based inventory flows in harmony. The path from early-stage forecasts to final inventory distributions, which leads to sold-out merchandise, is what sets it apart, particularly from fast fashion and seasonal retail environments.
- Aptos stands out with its self-adjusting algorithmic forecasting engine, which is built on different statistical models, allowing automatic observation and application of the most relevant forecast logic on the SKU-location level. This built-in intelligence will provide the retailer with the ability to achieve unique forecast accuracy across seasons, events, and product hierarchies, reducing manual overrides and improving their replenishment process.

- Aptos supports multi-echelon inventory optimization flow across supplier-, warehouse-, and store-level inventory flows. If projected demand and distribution logic can be used to position inventory forward, they then avoid both under- and over-stocking. For larger retailers with stores in various markets, channels, and during peak demand periods, the ability to validate their stock levels for ideal sales inventory is essential.
- The Artificial Intelligence Replenishment (AI Replenishment) solution from Aptos applies artificial intelligence and machine learning to forecasting and automated replenishment. It relies on historical trends, tagged events, and notifications based on exceptions to allow for proactive inventory changes. The solution can then automatically estimate the order quantities and lead times before the order is placed, thereby saving time and reducing human interaction.
- With the distribution planning module, Aptos leverages intelligent distribution based on a set of rules and size-specific logic. The distribution engine will maintain and account for sales velocity, seasonality, and size curves, thus providing a tailored solution for fashion, footwear, and sportswear retailers with finer points for distribution.
- The integrated reporting and performance dashboard features of Aptos include analysis tools enabling retailers to drill down on forecast accuracy, service levels, and on-hand. These features inform decisions by operational teams for day-to-day activity as well as strategic planners who will continue to improve the guesswork involved with strategies for inventory transformation.
- The Aptos solution is most applicable to mid-to-large fashion or specialty retailers with regional and channel methods. Organizations that may derive the most benefit can either already have Aptos Merchandising solutions or are looking for integrated retail planning with a supplier that includes automatic forecasting, allocation, or replenishment.

Challenges

- Aptos's Allocation, Forecasting & Replenishment platform, while robust, may be challenging for smaller or less mature retail organizations to adopt due to its implementation complexity and broader platform dependencies. Retailers without dedicated planning teams or IT support may require extended onboarding timelines.
- This platform leverages Aptos's more comprehensive merchandising suite, which means integrating with third-party ERP or any non-Aptos merchandising tools will likely take

additional work and customization. This may limit retailers that work in a best-of-breed application environment and desire a plug-and-play type of model.

- Aptos's recent divestiture of its planning and product lifecycle management business to Aptean may lead to concerns around the continuity of innovation in certain modules. While the core AFR capabilities remain under Aptos's remit, some users may perceive reduced synergies across upstream assortment and design planning functions.
- Although highly capable, the AFR solution's cloud-native architecture may raise challenges for retailers with limited IT infrastructure or operations in regions with unreliable internet connectivity. Offline or hybrid capabilities may be limited in such contexts.
- Retailers with highly unique or non-standard planning workflows may find the standard configuration constraints limiting and may need additional professional services to accommodate specific business models, which can raise the long-term cost of ownership.
- Retailers considering Aptos should carefully evaluate internal planning maturity, existing merchandising infrastructure, and IT resourcing to determine fit. For organizations without foundational forecasting or allocation processes, phased adoption or hybrid planning models may be more appropriate.

Blue Yonder

Founded in 1985 and headquartered in Scottsdale, Arizona, USA, Blue Yonder is a provider of supply chain, retail, and logistics solutions. Blue Yonder has concentrated its efforts on developing one AI-connected planning and execution platform that takes advantage of a common cloud infrastructure to run its applications.

In the Retail Forecasting and Replenishment (RFR) space, Blue Yonder also offers a suite of applied applications including demand planning, demand sensing, automatic replenishment, allocation, inventory optimization, and macro/micro supply-demand alignment. All of these capabilities are integrated into Blue Yonder's Planning platform, which is a cloud-native platform hosted on Microsoft Azure and enables predictive forecast analytics, real-time data, and closed-loop decisioning. It offers capabilities for organizations that work with demand variability, long lead time replenishment, and seasonality in large, multi-format retail businesses. Also, organizations often provide rigorous fulfillment accuracy requirements and frequent assortment changes and require fast fulfillment of accurate orders within physical and digital intersections.

Strengths

- Blue Yonder's demand forecasting solution supports multiple levels of granularity, including SKU-by-store, weekly/daily time buckets, and channel-based planning. Forecasts are built using statistical algorithms, machine learning models, and short-term demand sensing logic. Historical sales, promotions, and causal variables such as weather and local events are natively factored into the forecast model.
- What sets Blue Yonder apart is the tight integration between demand planning, replenishment, and execution in a single platform, combined with AI-driven scenario planning and real-time demand sensing. Few retail planning vendors offer such deep unification across predictive models and supply-side execution, particularly at enterprise scale. This closed-loop approach enables continuous feedback between forecasts and fulfillment outcomes, giving retailers high agility and control.
- The system supports real-time demand signal ingestion and forecasts updates, allowing retailers to respond to sudden shifts in consumer behaviour. Blue Yonder's demand sensing module enables daily forecast revision cycles based on recent sales and inventory positions.

- Replenishment planning is fully automated and aligned with retailer-defined inventory policies. The system generates order quantities based on forward-looking demand, vendor lead times, minimum presentation quantities, safety stock thresholds, and pack size rounding constraints. It also incorporates business rules related to delivery calendars and multi-node supply networks.
- The allocation module optimizes initial and in-season product placement decisions, using velocity curves, inventory stratification, and constraint-based logic to dynamically allocate inventory across stores and channels. This is particularly critical for seasonal products, fast fashion, and promotional event alignment.
- The platform provides embedded exception alerts and root-cause visibility, helping planners prioritize where intervention is needed. Forecast accuracy KPIs, out-of-tolerance exception handling, and “what changed” insights are available in near real-time.
- Scenario planning and simulation capabilities are embedded across modules, allowing planners to test assumptions such as price sensitivity, vendor delays, or promotional lift changes before finalizing supply or inventory targets. These tools help retailers during pre-season and in-season planning cycles.
- The solution enables multi-echelon inventory optimization across DCs, stores, and fulfillment nodes, supporting retailers who need to align inbound orders with available capacity, demand fluctuations, and shelf-service. The model optimizes trade-offs in working capital and customer availability metrics.
- The solution is typically implemented in phases through modular rollouts, where replenishment and demand planning often run as stand-alone use cases to start. Blue Yonder provides reference accelerators, a trained ecosystem of partners, and Azure-native integration pathways to minimize time-to-value.
- Blue Yonder is ideal for enterprise retailers with mature planning organizations and particularly for companies interested in reducing siloed planning, improving automation, and integrating demand/supply signals across the merchandising, logistics, and store execution layers.

Challenges

- The system assumes a high degree of data integration maturity. Forecasting and replenishment accuracy are contingent on consistent master data, location hierarchies,

promotion calendars, and vendor lead time reliability. Organizations lacking this structure may experience data remediation delays before reaching automation value.

- The configuration and rollout of Blue Yonder's platform requires skilled consulting resources and strong business process ownership. Blue Yonder's solutions require detailed alignment between business rules, process sequencing, and data model design, particularly in replenishment and allocation.
- From an out-of-the-box usability perspective, it is less flexible than many of the lighter-weight tools. The trade-off is the inherent flexibility from customization, and any business user may take for accept that specification, standards, protocols, configurational alerts/exceptions, and scenario templates take longer to master than other plans and reporting in general. As business users desire more autonomy over the revisions of plans and other versions of reports, companies will need to create sufficient enablement opportunities and reserves, or possibly supplier-related safety stock.
- The total cost of ownership is particularly significant when implementing from a multi-module perspective. Long-term consideration for the total costs of onboarding can easily size out many aspects of the Blue Yonder platform solutions, such as configuring alternatives, mass and scenario updates, and allowing governance of data and proprietary identities to manage and tune coefficients that can be long-term relationships or forever may easily inflate the domain total of onboarding costs.
- In 2024, Blue Yonder had a ransomware incident that ignited many critical incidents, business continuity concepts, and most notably, vendor dependency in mission-critical planning. Blue Yonder has done some things to improve its cybersecurity posture, but the incident does warrant engagement with the basic concepts of business continuity, mission-critical supply chain, and vendor dependencies.
- Retailers without centralized planning teams or standardized processes may struggle to realize full value. Blue Yonder's solution set is most effective when forecasting, replenishment, and merchandising strategies are already embedded in operational routines. Organizations with fragmented or decentralized planning functions may find the platform difficult to operationalize.

Kinaxis

Founded in 1984 and headquartered in Ottawa, Canada, Kinaxis offers a unified, in-memory supply chain planning platform known as Maestro®. With its heritage of being designed for complex manufacturing ecosystems, the Maestro platform has matured to enable use cases in retail and consumer-facing demand, replenishment, and inventory planning. At the core of its strategy is concurrent planning, a real-time interdependent model in which ongoing changes to demand, supply, inventory, and fulfillment plans are made with an immediate effect, together.

Within the Retail Forecasting and Replenishment (RFR) market, Kinaxis provides AI/ML-based demand forecasting, inventory target setting, replenishment optimization, promotion-aware simulation, and short-term sensing. These capabilities are not separated into siloed modules, but are orchestrated in a single shared model, which enables rapid visibility into plan impacts across functions. The platform is especially effective in environments where planning latency, disconnected merchandising decisions, and fulfillment variability create risk for downstream execution.

Strengths

- Kinaxis enables multi-tiered demand forecasting with SKU-store-week resolution using machine learning, time-series analysis, and external signal tagging. The forecast models are recalibrated automatically whenever new signals become available.
- Forecasts, replenishment plans, and supply plans are all co-generated using concurrent planning methods. Replanning at one-layer triggers concurrent updates across other planning areas without the need for data transitions or batch recalculations.
- Replenishment is deeply constraint-aware, incorporating stock coverage rules, lead-time variability, inventory policies, presentation minimums, and capacity limits across stores and DCs. Kinaxis continuously generates feasible, optimized ordering plans that reflect real-world fulfillment scenarios.
- Built-in scenario simulation and risk analysis are integral to the planning flow. Users can compare multiple replenishment strategies, simulate promo uplift curves, and test alternate allocation decisions with clear visibility into downstream service level, revenue, and inventory exposure.
- Short-term demand sensing is built into the platform's core engine, allowing for rapid adjustment of baseline forecasts using POS data, weather, local event tags, or sell-through

deviation. Retailers can respond to localized trends without redoing the entire forecast hierarchy.

- Kinaxis stands out with its concurrent planning engine, which performs continuous model synchronization across forecasting, inventory, and supply layers, removing batch latency, data inconsistencies, and misaligned handoffs. All users, regardless of function, work off a common, in-memory plan of record.
- The platform includes granular diagnostics and explainability tools, helping planners pinpoint the drivers of demand variance, forecast error, or inventory misalignment. Users can trace root causes, monitor plan performance, and feed corrections back into the simulation cycle.
- Workflow orchestration supports planner collaboration across merchandising, inventory, and logistics. Alerts, approvals, and plan versioning are embedded in the UI, reducing email or Excel dependency for plan reconciliation.
- Kinaxis is best suited for large retailers with complex supply chains, especially those operating multiple DCs, omnichannel networks, or hybrid fulfillment models. It is ideal for organizations that need synchronized decision-making between merchandising, inventory, and supply without sequential planning delays.

Challenges

- Retail-native UX design is improving but still trails platforms built for merchandising personas. While Maestro is functionally comprehensive, some workflows may require tailoring for non-supply chain users.
- Model configuration and deployment depend on clean, structured hierarchies. Retailers without consistent product-location hierarchies or promotion calendars will need to invest in data harmonization before fully activating concurrent planning capabilities.
- Execution layer integration is not plug-and-play. While Kinaxis provides APIs and adapters, integrating plan outputs into OMS, WMS, or e-commerce fulfillment engines requires effort, particularly when multiple legacy systems are involved. Retailers without a mature integration strategy may see delays in translating replenishment plans into execution.
- Retailers with fragmented ownership between demand, replenishment, and fulfillment planning may not realize full value. Kinaxis performs best when these teams align around shared KPIs, constraint definitions, and planning cycles.

Manhattan Associates

Founded in 1990 and headquartered in Atlanta, Georgia, USA, Manhattan Associates is known for its enterprise-class warehouse management, transportation, and order orchestration capabilities.

Manhattan has expanded its unified supply chain commerce platform to include forecasting, replenishment, inventory optimization, and order orchestration throughout a microservices-based, cloud-native architecture, all with a unified solution.

In the space of Retail Forecasting and Replenishment (RFR), Manhattan's demand planning and inventory optimization are part of its Manhattan Active® Supply Chain suite, which is aimed at connecting real-time, omni-inventory across all selling/fulfillment nodes. Typically, demand planning is not considered part of a forecasting tool. Yet, Manhattan embeds demand planning into its distributed order management/execution stack, which enables demand planners to marry supply plan flows of inventory with actual order behaviours across stores, warehouses, and drop-ship partners. The platform is best suited for retailers who plan and execute within a common set of processes and are looking for real-time availability signals across multiple nodes, multi-node inventory orchestration, and dynamically calibrating safety stock.

Strengths

- Manhattan offers an integrated approach to forecasting three flows: demand, inventory, and fulfillment. Forging forecasts at the SKU-location-channel level, which can be reconciled with near-term orders, safety stock target.
- The replenishment engine is designed for real-time recalculation of replenishment quantities based on forecast changes, shifts in consumer behavior, and execution-side signals. This degree of agility is particularly advantageous in omnichannel scenarios wherein inventory positioning and reorder timing must constantly be tempered by the evolving demand pattern.
- Manhattan has a unique architectural feature: it has native integration between forecasts and distributed order management (DOM). Thus, forecast-driven replenishment activities are also informing fulfillment decisioning, ensuring inventory is optimized against forecasted availability, on top of location (and location-level) priorities and cost-to-serve alternatives.
- Inventory optimization affords automated safety stock calculations using demand volatility, supplier reliability, service-level targets, and determination of stockout impacts from the historical record. Safety stock policies are then automatically calibrated so retailers may

rebalance working capital supply levels against service coverage, significantly reducing lead time to act.

- The forecasting module supports short- and long-horizon planning, event overlays, and seasonality modeling, with planners able to layer promotional effects, holidays, and regional demand variance. This supports daily-level planning in grocery and high-velocity retail, as well as mid-range planning in general merchandise and specialty segments.
- Manhattan stands out with its tight coupling of forecasting with downstream execution logic, particularly order sourcing and fulfillment orchestration. The same demand signal used for replenishment also informs picking prioritization, backorder handling, and capacity alignment, reducing disconnects between plans and actual flow.
- The software enabled intelligent replenishment for both brick-and-mortar and e-commerce channels simultaneously, as order quantities and locations can be adjusted based on the type of fulfillment node that is available and the customer's SLA commitments. This is especially valuable to retailers who operate dark stores and/or ship-from-store models, as well as retailers with regional fulfillment models.
- Manhattan is well-suited for larger enterprise retailers in grocery, general merchandising, specialty, and CPG verticals, typically with complex distribution networks, and requires that the processes for forecast, replenishment, and execution be coordinated in real-time, especially if they are pursuing real-time inventory visibility and unified commerce capability. .

Challenges

- Manhattan's planning capabilities are tightly embedded in its broader supply chain suite. For retailers looking to adopt forecasting or replenishment in isolation, integration with non-Manhattan OMS or WMS platforms may require custom effort and data mapping, as the platform assumes end-to-end visibility across execution layers.
- The forecasting engine is focused on operational planning and replenishment accuracy, not predictive analytics and AI/ML sensing. A retailer will most likely find Manhattan less flexible than best-of-breed forecasting platforms if they are looking for deep causal modeling, probabilistic forecasting, or explainability.
- Pre-season, merchandise financial planning (MFP), and assortment planning capabilities are limited and generally not addressed within Manhattan's current platform. Retailers seeking to connect early-stage assortment strategy with downstream replenishment will need to rely on adjacent planning tools.

- Retailers without integrated planning and execution ownership may not fully capitalize on Manhattan's end-to-end planning logic. The platform delivers the highest value when forecasting, inventory optimization, and fulfillment orchestration are managed within a common governance structure across store, e-commerce, and warehouse operations.

o9 Solutions

Founded in 2009 and headquartered in Dallas, Texas, USA, o9 Solutions delivers a unified planning and decision intelligence platform that supports demand forecasting, replenishment, supply chain alignment, and financial synchronization through a digital twin model. Built on its proprietary Enterprise Knowledge Graph (EKG) architecture, o9 offers composable, real-time planning capabilities that enable enterprise retailers to simulate and optimize decisions across merchandising, supply, inventory, and finance all from a single modeling environment.

In the Retail Forecasting and Replenishment (RFR) space, o9's Digital Brain platform enables granular demand forecasting, inventory policy design, replenishment planning, and what-if scenario modeling, with native support for AI/ML-based predictive analytics and constraint-based optimization. o9 serves large global retailers across grocery, specialty, electronics, department store, and fashion sectors, offering end-to-end visibility and responsiveness across short-, mid-, and long-term planning horizons.

Strengths

- Depth of granularity in the demand forecasting framework facilitates multi-SKU-store-day level planning of operational decisions, as it unpacks sell-through history, promotional events, seasonality, external variables, and causal drivers. Forecast models leverage both AI/ML and classical time-series methods, and one can tune forecasting models at either local or enterprise levels.
- Unique embedded probabilistic forecasting and demand sensing capabilities enable planners to model for uncertainty and near-term demand variability by leveraging real-time POS data, inventory position, competitor pricing, weather, and digital signals.
- All planning entities can be represented as nodes and relationships in the EKG-based modeling framework, such that it supports real-time impact analysis and extension of the model without reconfiguring the foundational logic of the model.
- Replenishment is contingent aware, multi-echelon based, and balances assortment inventory plans for store/DC and transportation lead times against batch constraints, stock coverage rules, and carryover. The framework allows for closed-loop replenishment workflows that react in real-time to upstream and downstream optimizations.
- Scenario planning and what-if simulation are all natively embedded across the demand, inventory, and supply layers. Planners can engage what-if pricing changes, vendor delayed

metrics, promotional uplift variations, or shelf capacity constraints, and can see real-time effects on Tier flow, service level, and financial targets.

- With the advanced capabilities and unified demand-supply-finance modelling at its essence, o9's platform connects commercial forecasts, replenishment orders, and financial targets, while ensuring that the planning frameworks work in unison and achieve alignment.
- o9 stands out with its Enterprise Knowledge Graph (EKG) architecture, which allows the platform to continue ingesting, connecting, and reasoning across structured and unstructured planning inputs in nearly real-time. With this architecture, o9 is one of the few platforms that can think about granular execution-level planning and aggregated strategic modeling holistically, without duplicating data or creating planning silos.
- Forecast overrides, performance diagnostics, and scenario comparisons are available through role-based dashboards that utilize o9's configurable UI layer. Research users can pivot from guided workflows to diagnostic drilldowns or KPI simulations without switching between tools.
- o9 has seen strong traction across North America, Europe, and Asia-Pacific, with marquee retail clients in Walmart, Estée Lauder, and Starbucks. Its industry breadth of firms serves grocery, beauty, consumer electronics, fashion, and department stores, especially where the complexity of multiple channels and inventory nodes requires more planning processes.
- o9 is highly suited for large, multi-format, multi-channel retailers that are looking to replace legacy planning processes with a suite of end-to-end applications on an AI-native platform. o9 is particularly strong in organizations that want a single operating environment for both short-term demand planning and long-term financial and supply planning processes.

Challenges

- Initial model configuration and data mapping require significant alignment effort, particularly when ingesting data from fragmented legacy ERP or merchandising platforms. o9's EKG model demands a clean and complete entity relationship setup to unlock full platform flexibility.
- The breadth and flexibility of the platform may equally force planning teams to spend time developing new models and recognizing interactions between granular and strategic layers. Much can be learned during initial training and governance around model extension to limit unintentional conflicts in logic.

- Retailers lacking centralized planning, ownership, and clarity around their data governance structure will be unable to leverage the EKG capabilities available from o9. The EKG platform is useful because of its interconnectivity and functional capabilities, yet teams with fragmented data sources, or individually negotiated planning domains that only concentrate on single, isolated teams, lead to lower real-time responsiveness and eliminate a cohesive planning experience.

Oracle

Founded in 1977 and headquartered in Albuquerque, New Mexico, USA, Oracle offers a suite of AI-enhanced retail planning solutions via its Retail Demand Forecasting, Inventory Planning Optimization Cloud Service, and Demand Management modules within Oracle SCM Cloud and Retail Cloud. Leveraging Stored scientific algorithms, AI/ML capabilities, and the unified Oracle Retail Data Store, these solutions enable end-to-end forecasting, replenishment, and allocation across channels.

Oracle's RFR offerings ingest daily sales, inventory, promotion, and external signals, generating store-SKU-shop-level forecasts, automated replenishment order suggestions, size-aware allocation, and scenario-based simulation, all hosted on a cloud-native architecture with scalable microservices. These capabilities address complex needs like seasonal lifecycles, short lead times, and numerous SKUs.

Strengths

- Multi-model demand forecasting spans time-series, causal, smoothing, and machine-learning methods. Weekly or daily SKU-store forecasts often include causal drivers in the forecasting patterns. We used AI-assisted curve selection to include variables such as promotions, seasonality, HOLDS, and weather when creating the models, which can improve forecast accuracy.
- Demand sensing provides visibility into timely re-forecasting. A re-forecast incorporating recent point-of-sale (POS) data, inventory stock positioning, and external events or market conditions can quickly transform short-term planning and replenishment actions.
- Replenishment engine automates order creation, considering lead times, shelf-life, service levels, minimum presentation rules, and dynamic business logic. Orders can be automatically released in line with fulfillment and vendor constraints.
- Lifecycle allocation ensures inventory flows match demand patterns, optimizing placement from distribution centers to stores, adjusting for size profiles, product decay, regional velocity, and replenishment priorities.
- Scenario simulation embedded across planning flows helps evaluate inventory targets, supply constraints, and fulfillment timing during promotional spikes or demand surges. Oracle's tools support rapid evaluation and adjustment before finalizing plans.

- Exception-based workflows and alert dashboards guide planners to address demand variance, stock-outs, or excess inventory through a structured review process.
- The Oracle Retail Data Store serves as a unified data backbone. Therefore, transaction data, inventory data, promotion data, order data, and external datasets are all combined within the data store. This provides the ability to conduct a consistent analytics approach and minimize data silos across planning use cases.
- Oracle stands out with its deep functional integration through a single Retail Data Store, AI-enabled forecasting, size-aware replenishment, and unified allocation all within one scalable cloud structure. Many vendors lack such end-to-end orchestration across planning, replenishment, and allocation built on one consistent data model.
- Oracle is ideal for mid to large retailers already embedded in Oracle ERP/SCM ecosystems or those planning to scale modularly, looking for a unified, end-to-end planning solution built on a consistent data framework.

Challenges

- Replenishment is not natively integrated with Oracle Retail Order Management or ERP systems out of the box. While replenishment recommendations are system-generated, they must be routed via additional middleware or integration workflows into execution environments. This limits straight-through order automation unless custom connectors are built or Oracle Fusion SCM is already in place.
- Forecast performance for new item introductions can be inconsistent, especially in specialty retail or fashion, where historical data is limited or volatile. Oracle's transfer learning techniques require properly structured attribute hierarchies and sales histories, and without these, planners often override AI-suggested forecasts.
- Retailers operating on hybrid Oracle and non-Oracle stacks may face delays in data movement, especially with inventory, order, and promotion feeds. While Oracle Retail Data Store provides a consolidated architecture, it assumes homogeneous integration for maximum value.
- The user experience for forecasting and replenishment planners can feel fragmented. While dashboards are available, users frequently rely on Oracle APEX for interface extensions or default to Excel and Power BI for visualization. This adds friction in real-time review and hinders collaborative planning.

- Customization of Oracle's replenishment logic often requires scripting via the Innovation Workbench, especially for unique business rules. For non-technical teams, this introduces dependency on IT or partners.
- Promotions and event-based uplift logic must be manually linked to forecasts. Although Oracle supports promotion tagging and lift curves, the integration of marketing calendars and uplift models is not fully automated unless configured explicitly. This requires cross-functional input and testing to prevent inaccurate promotional replenishment.
- Retailers using Oracle Retail Forecasting without the full suite may struggle to realize synergy. Oracle's RFR modules are built for interlock across planning domains. When used in isolation, some automation benefits, such as life cycle staging, size scaling, or localized markdown flows, remain underutilized.
- Retailers with decentralized merchandising or store-level planning teams may find forecast overrides and low system trust common. Oracle's demand and replenishment tools function best when planning governance is centralized, KPIs are shared across functions, and execution flows are tightly connected. Without this, teams may revert to manual inputs and override AI outputs, limiting the overall platform ROI.

RELEX Solutions

Founded in 2005 and headquartered in Helsinki, Finland, RELEX Solutions is a provider of an AI-native supply chain and retail planning platform. Its forecasting and replenishment capabilities are designed to address the complexity of retail environments with high-volume, high-SKU assortments, promotional dynamics, seasonal trends, and slow movers. The platform offers a unified yet modular solution stack that includes demand forecasting, replenishment, inventory planning, space optimization, pricing and markdown optimization, and supply chain collaboration tailored to the needs of food, grocery, convenience, DIY, pharmacy, and general merchandise retailers, as well as wholesale companies and consumer packaged goods manufacturer.

In the Retail Forecasting and Replenishment (RFR) space, RELEX provides a highly integrated platform that unifies demand planning, inventory optimization, allocation, and replenishment as outputs of a single demand signal, rather than siloed modules. The platform features a granular data model, extensive parameterization, and built-in automation to enable scalable action across thousands of locations, millions of SKUs, and complex flows of perishable and volatile products. RELEX works very well in scenarios requiring high forecast frequency, adaptability to in-store subtleties, seasonal trends, promotions, and fulfillment constraints that necessitate rapid recalibrations.

Strengths

- RELEX manages SKU-store-day level forecasts across millions of item-locations using a hybrid of demand transference logic, statistical forecasting, and machine learning. Models are automatically tuned and updated in claim each retailer and geography, reflecting instantaneous sell-through, weather, calendar, and localized events.
- Forecasting is coupled to automatic replenishment, allocation, and capacity planning as part of a shared model, so downstream decisions reflect the demand picture at any point in time. The integration results in a rapid feedback loop to minimize over-stock, stockouts, and miss-deliveries across both fresh and non-fresh categories.
- Replenishment logic includes real-time safety stock calculation, vendor lead time shifts, shelf-life rules, store presentation standards, and rounding logic, producing constraint-aware, high-frequency order suggestions that adapt to availability and cost trade-offs.
- The platform allows automatic detection of demand pattern breaks and anomaly correction, reducing noise from outliers, incorrect promotions, or supply disruption. This is particularly

effective in grocery and general merchandise chains where demand profiles fluctuate with weather, holidays, or local competitor activity.

- RELEX is designed for planners to control exceptions, not override the system. AI-driven automation handles stable demand patterns, while planners intervene only in SKUs flagged for variance, disruption, or constraint violation. This exception-based design allows users to scale planning without expanding teams.
- RELEX stands out with its unified data model and real-time synchronization across all planning domains. Forecasts, inventory flows, and capacity plans are not passed between modules they are derived from a common model that recalculates as new inputs arrive. This architecture is especially powerful in high-SKU, high-promo environments where traditional handoffs break down.
- The platform handles multi-echelon optimization across DCs, stores, and suppliers, factoring in transportation constraints, minimum order quantities, truck fill efficiency, and shelf space restrictions.
- RELEX continuously improves its unified user experience across the platform, serving everyone from supply chain planners to merchandisers. The UI adapts to different roles, allowing organizations to customize workflows and dashboards for their specific team needs.
- RELEX is best suited for large-format retailers operating in grocery, pharmacy, home improvement, or general merchandise segments, especially where store-level freshness, promo complexity, and supply-side disruption risk require continuous, automated adjustments. .

Challenges

- RELEX assumes highly structured master data across store layouts, inventory attributes, and vendor SLAs. Retailers with fragmented data governance or legacy systems may face significant upfront harmonization efforts before real-time planning can be activated.
- The platform's high configurability requires initial decisions on replenishment policies, safety stock logic, and exception thresholds. Organizations without centralized planning policy ownership may delay full-scale automation due to inconsistent rule definitions.
- Retailers without centralized ownership of forecasting, supply planning, and in-store execution may underuse RELEX's tightly integrated workflows. The platform performs best when supply chain, merchandising, and store ops align around shared availability and service metrics.

Retalon

Founded in 2002 and headquartered in Toronto, Ontario, Canada, Retalon offers an AI-native retail planning platform that combines forecasting, replenishment, allocation, promotions, and pricing. Unlike vendors that operate separate modules for separate functions, Retalon offers an integrated decision system where demand forecasts are immediately connected to downstream inventory and pricing decisions through a unified and single logic layer. Retalon approach allows retailers to maintain planning discipline and autonomy from unideal spreadsheets or planning silos while significantly reducing the time from insight to action.

Retailers and their suppliers have unique challenges managing a complex assortment, rotating frequently for promotions, and an ever-changing SKU variability in the industry. Thus, it is more frequently adopted in fashion, specialty, and multi-format retail environments where the need for aligned decisions on merchandising, supply chain, and pricing is often recognized at the C-suite level. The main benefit of Retalon is that it eliminates transfer and handoffs between planning layers to ensure inventory and pricing actions are reflecting real-time demand estimates through the process with as little friction as possible.

Strengths

- Forecasting models are optimized at the SKU, store, and calendar level for highly relevant, location-aware estimates that incorporate sales seasonality, promotional overlays, and lead-time buffers. These components allow for decisions in an environment with high volatility of traffic, product ranges with short lifecycle, or otherwise localized assortment considerations.
- Forecast outputs are not treated as standalone metrics but act as a base layer for replenishment, allocation, and pricing simulations. The same underlying logic drives ordering quantities, stock transfers, and markdown timing, ensuring continuity between planning decisions and execution actions.
- Replenishment logic includes constraint-aware automation. The system dynamically adjusts reorder quantities based on vendor order windows, shipping constraints, shelf presentation rules, and safety stock targets. Users can simulate adjustments to those parameters and observe the resulting shifts in ordering decisions.
- Promotional planning and pricing logic are directly embedded within the forecasting-replenishment cycle. Instead of retrofitting demand uplift after promotions are finalized, users

can simulate the impact of proposed pricing events on stock levels and sell-through forecasts before locking in the promo calendar.

- Scenario planning is supported natively through demand-shift simulations, margin impact analysis, and store-specific forecast overlays. This helps retailers evaluate multiple pricing and replenishment strategies before committing to a path, especially critical in seasonal or margin-sensitive categories.
- All planning functions operate on a unified predictive engine rather than separate modules. This means price sensitivity changes, stock visibility updates, or delivery disruptions can immediately cascade into replenishment logic without user re-entry or system integration delays.
- Retalon's architecture uniquely treats demand, replenishment, pricing, and promotions as co-dependent planning outcomes generated from a single mathematical prediction tree, not as outputs from separate modules stitched together. This structure means any change in price elasticity, event cadence, or product velocity automatically recalibrates replenishment flows and stock targets without requiring users to transfer or reconcile data between systems. It's one of the few platforms where replenishment, allocation, and pricing are not integrated, they are co-generated from the same forecast source.
- The interface supports guided workflows and validation layers, allowing planners to review model-generated decisions, apply contextual knowledge, or override logic with structured justifications, without disrupting the engine's learning feedback loop.
- Retalon is most beneficial for retailers with complex assortments, heightened promotional intensity, or heterogeneous SKU variations, especially those interested in a forecasting and replenishment engine that integrates pricing and supply functions under a single decision logic framework.

Challenges

- Model behavior is tightly coupled across functional areas, which can introduce unintended interdependencies. For example, changes to price sensitivity assumptions or promotion frequency can impact stock planning outputs. Organizations without clear governance across merchandising and supply teams may struggle to coordinate these ripple effects.
- System outputs depend on structured and consistently maintained promotional calendars. If marketing teams do not input accurate start/end dates, uplift assumptions, or promotional

segmentation, the demand forecast logic may become skewed, resulting in overstocking or under-preparedness during event cycles.

- Integration with downstream order management systems is not turnkey. While replenishment logic generates execution-ready order quantities, clients must configure custom export templates or middleware to automate order releases into ERP or OMS systems.
- Forecasting for new product introductions is heavily reliant on attribute matching, requiring thoughtful hierarchy tagging and product affinity modeling. In product categories where historical comparables are limited or missing, forecast accuracy may degrade without manual anchor adjustments.
- Retalon's simulation interface, while powerful, may not be intuitive for first-time planners. Users often require enablement to understand how forecast inputs, constraint configurations, and promo triggers interact. Without this onboarding, planners may default to overriding recommendations rather than working with the simulation tools.
- The system does not offer standalone modules. All functionality is designed to operate within a single predictive engine. This architectural choice makes it difficult for organizations that want to adopt forecasting or pricing optimization as isolated tools. Retalon performs best when used holistically.
- Retailers without tightly aligned workflows across forecasting, supply, pricing, and promotion may not realize full platform value.

SAP

Founded in 1972 and headquartered in Walldorf, Germany, SAP is the provider of enterprise software globally. Its planning suite, SAP Integrated Business Planning (IBP) is part of the broader SAP Digital Supply Chain offering and is designed to support real-time, unified planning across demand, supply, and inventory functions. SAP IBP covers short-term and long-term demand forecasting, demand sensing, promotion planning and automation for replenishment, and multi-echelon inventory optimization. These capabilities take advantage of native integration with SAP S/4HANA and the SAP Customer Activity Repository (CAR) to exchange data between planning applications and execution systems in real-time. SAP dominates the market of large format retailers, supermarkets, CPG-based omnichannel brands, and several truly global retail conglomerates. It is designed specifically for efficient integration among forecasting and replenishment processes with an organization's supply planning, ERP, and execution systems.

Strengths

- SAP IBP supports flexible demand forecasting and demand sensing, using both statistical models and ML-based algorithms. Forecasts can be generated at various granularities, including SKU-store-week and channel-level aggregations, with automation of outlier correction and causal factor management.
- Demand sensing provides retailers with daily re-forecasting, which pulls in POS, orders, and forecasts, weather, events, and digital signals to recalibrate short-term demand. This enables businesses to change their replenishment decisions in response to near real-time changes in consumer behavior.
- The replenishment engine, through SAP CAR Predictive Replenishment, facilitates automated ordering logic that considers lead times, shelf-life, order frequency, and minimum display quantities. The model is calibrated for fresh and non-perishable items, respectively.
- Multi-echelon inventory optimization logic helps align DC-store ordering with demand volatility, safety stock policies, and transportation lead times. This improves working capital usage while preserving availability across the supply chain.
- Scenario modeling and simulation capabilities are built into IBP, with particular emphasis on the supply-demand alignment workflow. Planners can analyze the impacts whenever supply is constrained, vendor delivery timing is not as expected, or policies change, while assessing inventory positions and fulfillment rates.

- Collaboration is enabled through SAP Workspaces and Excel integration, planners, category managers, and supply chain leads can all work within the same model concurrently, regardless of roles, while employing role-based access and security to data.
- SAP stands out with its deep integration across planning and execution to provide closed-loop capabilities where forecast, replenishment recommendations, and orders continuously flow across IBP, CAR, and S/4HANA. This allows all aspects of visibility from planning to fulfillment to occur seamlessly before even considering the duplicated models of data and middleware.
- SAP is well-positioned for enterprise retailers who have made a substantial investment in SAP ERP infrastructure, or for those who want a cohesive planning and execution landscape that offers end-to-end automation, scenario-based planning.

Challenges

- Forecasting and replenishment accuracy heavily depend on data foundation quality. Poorly maintained product/location hierarchies, inconsistent promotion calendars, or missing causal data can undermine model reliability and require long remediation cycles.
- The interface and modeling structure can be complex for new users. While powerful, IBP and CAR modules require structured onboarding and training. Many users rely on Excel integration due to initial difficulty navigating web-based interfaces.
- Implementation timelines and costs can be high. Although modular, true value from SAP's platform is usually realized when IBP, CAR, and ERP are integrated, leading to higher upfront consulting, integration, and customization effort.
- Retail-specific usability limitations exist in analytics and dashboarding. While integration with SAP Analytics Cloud is possible, many retail clients still prefer to use external BI tools for operational insights.
- IBP and Predictive Replenishment do not directly execute orders they generate order recommendations that must be consumed by execution systems like S/4HANA, requiring strong IT coordination and data sync mechanisms.
- The platform is less suited for retailers without a centralized supply chain and planning teams. Distributed or regionally siloed retail structures often face adoption challenges due to misaligned workflows, leading to forecast overrides and planning inconsistencies.
- Retailers with fragmented planning ownership across replenishment, demand, and supply functions may face difficulty realizing SAP's full platform value. IBP is designed for centralized

orchestration and shared accountability across functions. When used in siloed teams or disconnected merchandising structures, collaboration drops and automation benefits decline, limiting end-to-end optimization.

Solvoyo

Founded in 2005 and headquartered in Boston, Massachusetts, USA, Solvoyo is a decision automation platform provider focused on transforming retail, e-commerce, and quick-commerce supply chain planning and analytics through cloud-native, AI-augmented solutions. The company delivers an integrated suite covering demand forecasting, inventory optimization, replenishment planning, and supply chain orchestration, tailored for data-rich, high-SKU retail environments.

Solvoyo's Demand Forecasting and Replenishment solutions are positioned as part of its unified retail planning suite, designed to support both strategic and operational decision-making. Delivered as a configurable, modular SaaS platform, it enables continuous optimization from SKU-level forecasting to order generation across stores, warehouses, and distribution centers.

Solvoyo blends machine learning, mathematical optimization, and scenario-based planning in a single platform, reducing manual intervention while improving inventory performance. The solution is built to accommodate dynamic retail operations with complex replenishment logic, seasonal shifts, and promotion-sensitive demand. The platform is built to support retailers moving toward autonomous planning while maintaining flexibility across diverse operating models.

Strengths

- Solvoyo's demand forecasting and replenishment solution offers a single planning model that spans store, warehouse, and vendor networks. The solution uses machine learning, time-series algorithms, and external demand drivers such as weather accurate forecasts over thousands of SKU-location combinations.
- Solvoyo stands out with its hybrid optimization engine, which allows it to calculate dynamic safety stocks and work with supplier parameters such as delivery lead time, order frequency, pack sizes, and shelf life and logistics constraints to automate replenishment decisions using mathematical programming and adaptive AI. Clearly, the optimization process undertaken is generalizable under constraints such as store capacity and minimum display units.
- Solvoyo is capable of fully automated replenishment planning based on real-time sales and inventory signals, as well as supply-side signals. It creates recommended order plans with little or no manual override, valuable, particularly for high-SKU fast-moving categories such as grocery, FMCG, and fashion apparel and accessories.

- By using scenario-based planning capabilities, retailers are able to simulate demand spikes, shifts in seasonality, promotional uplift, and supply disruption scenarios. Users are able to forecast reorder results prior to committing and have the ability to minimize the potential risk of overstock and lost sales during increased demand periods.
- The solution uses intelligent exception alerts and auto-resolution workflows so planners can be focused on the management of plan deviations from normal/expected performance. The higher rate of adoption for the system, as well as acceptance of system recommendations among users who are dependent upon the system in their role, indicates that users trust the system and the appropriate alignment between algorithms and planner workflows.
- Solvoyo provides multi-echelon inventory optimization capabilities, storing what inventory where across DCs and stores and incorporating transportation cost, lead time variability, and supplier constraints.
- Solvoyo is best for mid-to-large retailers that want to transition from rule-based inventory planning to algorithm-driven inventory planning. It's especially valuable to retailers with high-SKU portfolios, with a mix of centralized governance and decentralized execution at the regional or store levels.
- Solvoyo's embedded data diagnostics and flexible data integration capabilities help customers assess data readiness and enable ongoing improvement of the input data, such as master data across products, locations, calendars, and suppliers, to continuously advance the level of decision automation.
- Solvoyo's unique customer success model with ongoing monitoring ensures ongoing improvement of supply chain KPIs while advancing digital transformation objectives.
- Solvoyo provides APIs and adapters to enable fast Integration with homegrown or legacy ERP/WMS/POS systems. For environments without standardized data protocols, Solvoyo offers alternative approaches to managing data, including integration with custom data sources and the ability to upload data from spreadsheets. Through a configurable user interface, the customer success team can configure workflows for planning parameters on the platform.
- Solvoyo's configurable UI and workflows enable flexibility to tailor workflows and diagnostics capabilities to niche businesses. While there are standard templates for different types of retailers, customer success teams can easily adjust these to meet the specific requirements beyond out-of-the-box capabilities.

Challenges

- The level of planning automation may require organizational adjustments. Teams accustomed to manual planning may struggle to transition unless supported by strong change management and internal championing.
- While Solvoyo emphasizes ML-driven planning, it requires clean, consistent inputs like transportation lead-times, demand signals, and external indicators. Retailers lacking strong master data management or automated feeds may struggle to realize the system's full potential.
- Solvoyo is truly cloud-native and has no on-premises mode. This level of flexibility offers retailers improved agility and scalability; however, this also may restrict retailers with important data residency guidelines, or legacy IT environments, or regulated compliance processes that mandate on-premises. To fully utilize Solvoyo, organizations should prepare for a complete shift to the cloud.

SymphonyAI

Founded in 2017 and headquartered in Palo Alto, California, SymphonyAI is a vertical AI SaaS company building industry-specific enterprise solutions. Its retail and CPG division is delivering AI-enabled solutions across a broad range of functions, including demand forecasting, replenishment, allocation, promotions, merchandising, and store execution. These solutions help retailers gain better forecasting accuracy, eliminate inventory waste, and manage the entire merchandising life cycle through predictive and generative AI.

SymphonyAI's Demand Forecasting and Replenishment capabilities are core components of its CINDE Retail/CPG platform. These are offered as modular AI services within the connected suite, with deployment options across cloud-native, API-integrated, and managed service models. The company also offers Forecasting-as-a-Service (FaaS) for retailers seeking fast-track AI outcomes without in-house complexity.

SymphonyAI is known for its strong AI engineering focus and the integration of generative AI within retail planning applications. Notably, it has partnered with Intermarché, Save A Lot, and others to implement forecasting and replenishment solutions across distributed store networks.

Strengths

- SymphonyAI offers a tightly integrated Demand Forecasting and Replenishment solution that uses predictive and generative AI to deliver real-time, SKU-store-level forecast precision. The platform incorporates event-based signals, customer behavior patterns, and shelf data to create high-fidelity, forward-looking demand predictions across short- and long-term horizons.
- A key differentiator is the availability of Forecasting-as-a-Service (FaaS), enabling retailers to outsource data ingestion, model generation, and performance monitoring while benefiting from SymphonyAI's data science and AI optimization teams. This model is especially beneficial for mid-market retailers lacking internal forecasting expertise.
- The platform includes automated replenishment capabilities for warehouse and store nodes, based on artificial intelligence that calculates dynamic safety stock, order points, and reorder amounts based on forecasted accuracy and service-level target. The replenishment policies, such as auto-tuning based on real-time actions from an assortment of signals, cases of need for shelf stock, and sales activity, provide fewer stockout and markdown events.

- The Demand Planner Copilot, which has been embedded into the solution, is the first AI assistant to identify and surface abnormal forecast signals, exceptions needing replenishment, and other missed opportunities for planners. The planners can intervene and make changes in real time, which allows them enhanced human and machine collaboration in their decisions made around inventory.
- Multi-echelon inventory-based logic provides SymphonyAI with the capability to optimize the absolute best distribution of goods between DCs and stores, while also being able to incorporate replenishment scenarios with logistics limitations and vendor lead times from the first step in the process.
- The solution also has built-in models for retailers to provide an estimated impact for each promotion or price event. In addition to this, the models allow planners to build uplift curves and know the baselines for each promotional period, allowing for a more accurate reduction in overstock from anticipated promotional misalignment.
- Retailers can use interactive dashboards and KPI reports to take important actions by monitoring and optimizing forecast accuracy, on-shelf availability, and lost sales estimates at varying levels. Retailers can use drill-down views to review and repair root cause analysis as quickly as possible.
- SymphonyAI is ideal for mid-to-large format retailers seeking a fully integrated, AI-native platform for demand forecasting and replenishment, particularly those prioritizing real-time automation and AI-managed exception handling.

Challenges

- Although the FaaS paradigm makes it easier to onboard, retailers still need to have clean, harmonized data structures to train the models. Retailers without strong levels of data governance may have more challenges when onboarding.
- The platform's AI-driven workflows can involve a steep learning curve for users accustomed to traditional forecasting tools. Training and change management become critical to ensure user confidence and model trust.
- While SymphonyAI offers managed deployment services, integration with legacy ERP or POS systems may require middleware or additional effort, particularly for retailers with fragmented tech stacks or region-specific applications.

- Highly specialized or niche retail verticals may find some configuration constraints in workflows or data models. For example, luxury, high-touch service models or short-lifecycle DTC brands may require extended tailoring.
- SymphonyAI's CINDE platform is still expanding in visibility compared to some traditional retail planning brands. For retailers seeking wide analyst and peer validation, SymphonyAI may have fewer public benchmarks or cross-industry deployments to reference.
- Retailers without a centralized supply chain planning function, or inventory center of excellence, should closely review their internal readiness prior to implementing SymphonyAI's integrated forecasting and replenishment solution.

ToolsGroup

Founded in 1993 and headquartered in Boston, Massachusetts, USA, ToolsGroup is a provider of supply chain and retail planning solutions, known for its deeply embedded probabilistic forecasting foundation. The company's retail forecasting and replenishment capabilities are delivered through its "JustEnough" suite, offered as part of a modular, composable architecture and increasingly unified with its Data Hub and AI-based platform services. ToolsGroup emphasizes end-to-end visibility and responsiveness, with demand, inventory, and pricing decisions closely tied through a probabilistic forecast engine, dynamic fulfillment optimization, and prescriptive analytics.

In the RFR space, ToolsGroup provides SKU-location-time forecasting, replenishment planning, multi-echelon inventory optimization, allocation, and promotion-aware planning, with real-time signals flowing through each module. Its retail solution is most effective when integrated into a data-rich operational context and is aimed at retailers with large assortments, short product lifecycles, and complex inventory networks. The platform is particularly well-suited for use cases that demand granular demand sensing, downstream inventory rebalancing, and advanced pricing-awareness embedded into replenishment.

Strengths

ToolsGroup's primary differentiator lies in its use of probabilistic forecasting to drive every aspect of inventory and replenishment planning. Rather than rely on point forecasts, the system generates full probability distributions at the SKU-location-time level. This statistical modeling is embedded into allocation, safety stock, and fulfillment logic, giving planners a probabilistic forecast, not only of demand volume but also of the likelihood of meeting service levels and margin targets.

The replenishment engine supports daily recalculations of order needs based on shifting demand and supply signals. As the system continuously ingests new transaction data, be it POS, causal events, or promotions, it dynamically recalibrates replenishment quantities across stores and DCs. The use of multi-echelon optimization logic ensures inventory flows are aligned across all layers of the distribution network.

Inventory optimization is applied holistically, including store-to-store transfers, upstream planning, and in-season reassortment. The platform continuously evaluates margin gains vs. transfer cost for reallocation opportunities, allowing for dynamic rebalancing even during live promotional periods or assortment transitions.

ToolsGroup integrates promotions, markdowns, and price elasticity directly into its forecasting and replenishment flows. Its PromoAI and MarkdownAI modules allow users to model promotional mechanics and dynamically simulate the impact of price changes on demand curves. This forecasting-to-fulfillment linkage is rarely found in RFR systems, and sets ToolsGroup apart in terms of merchandising-financial alignment.

The allocation engine supports granular sales-aware decisioning, using lifecycle models, store prioritization logic, and channel-specific constraints. For example, the system can prioritize allocation to the channel most likely to clear stock profitably based on real-time margin modeling.

Data Hub, ToolsGroup's digital twin of the inventory lifecycle, enables real-time response to changes in demand, stock positions, or upstream disruptions. This data fabric feeds into allocation and replenishment modules in near real time, allowing planners to approve or adjust orders intra-day, rather than waiting on overnight runs.

Forecasting and replenishment capabilities are delivered with scenario modeling, demand sensing, and service-driven optimization in the same environment. ToolsGroup's "stock-to-service" methodology allows each SKU-location to be modeled against a service-level goal, adjusting stock investment to meet that objective while minimizing working capital.

JustEnough is ideal for retailers with diverse fulfillment nodes, omnichannel complexity, and short planning cycles, particularly in fashion, specialty, convenience, and general merchandise. Customers with high SKU count and the need to adapt pricing, assortment, and replenishment daily stand to gain from ToolsGroup's model-driven logic.

Challenges

- ToolsGroup's prescriptive AI forecasting and inventory optimization models rely on sufficient transactional and master data quality, especially during initial deployment. In environments with unstructured historical sales, inconsistent master data, or siloed systems, early model calibration and causal tuning can be more error-prone and may require closer monitoring. However, unlike many traditional predictive systems that effectively manage until data issues are resolved, ToolsGroup can begin generating value even from "messy" data and progressively improve accuracy, meaning that retailers who invest in parallel data-governance improvements are best positioned to unlock its full ROI and optimization potential.

- ToolsGroup is currently overhauling the JustEnough user interface as part of its Agentic UI roadmap. While core planning logic remains stable, users may encounter visual or functional inconsistencies across modules like allocation, assortment, and OTB, particularly when switching between legacy and updated workflows. This may result in a mixed user experience during the interim transition period.
- Retailers with fragmented planning ownership may have difficulty operationalizing value, as ToolsGroup's architecture is designed for cross-functional planning environments that translate demand forecasting, replenishment, inventory, and pricing decisions. In organizations where merchandising, pricing, and supply-chain operations are silos or where change-management decision-making may arguably create limits of adoption barriers, the integrated optimization capabilities of the platform may be limited.

Appendix

Market Definition & Capabilities

QKS Group defines Retail Forecasting and Replenishment as “solutions that predict demand at granular levels and orchestrate replenishment across interconnected retail ecosystems with historical sales, seasonality, market trends, macroeconomic variables, and many other factors into consideration using advanced analytics, artificial intelligence (AI), and integrated planning workflows.” These solutions enable demand forecasting, inventory optimization, replenishment execution, allocation, and impact analysis of promotions so that retailers can function optimally even in a severely fragmented and volatile environment. Most solutions provide retailers and supply chains with orchestration along planning and execution in their networks. This gives rise to dynamic inventory flow, which ensures that products are positioned where optimum demand exists.

Retailers in 2025 face an entirely new level of complexity, which arises from the volatility of demand, supply chain fragmentation, and the expectation of customers for heightened speed and responsiveness. In earlier years, retailers only dealt with the issue of seasonality and managing inventory. Now they are challenged with short lead time cycles and their unpredictability, economic uncertainty, labor shortages, and regulatory pressure for sustainability.

The pace of omnichannel business is only compounding complexities for retailers navigating an influenced consumer base in significantly unlinked commerce environments. As a result, organizations are rapidly deploying contemporary RF&R solutions that are intelligent and AI-embedded, that go beyond traditional forecasting. They can now serve as decision engines by leveraging present-time data streams captured by a POS system, regardless of a digital channel, along with IoT-factored inventory sensors and uncontrollable variables, such as geo-location, social sentiment, economic variables, and thus, modernized by estimating and specifying whole replenishment choices dynamically.

Among the major changes from 2024 to 2025 is the adoption of advanced probabilistic forecasting, scenario forecasting, and simulation techniques that alter the reliance on point forecasting. Rather than a single numeric expression of demand, retailers are modeling

uncertainty to forecast multiple potential outcomes, improving agility in response to sudden changes in the market.

Furthermore, the development of autonomous replenishment workflows is being widely adopted more extensively, where stock transfers and purchase orders are automatically created and executed through management systems based on consumption patterns in real-time, including inventory levels and capacity constraints. A significant improvement is gained from reduced manual engagement cycle time for planning forecasting work is reduced, while both excess stock as well as stockout risk are minimized.

Moreover, by 2025, RF&R platforms will also evolve to embed sustainability and efficiency into the central planning logic. Retailers are beginning to demand systems that integrate approaches that reduce wastage through improved allocation, dynamic markdowns, and smart lifecycle planning of perishables and short-lived products. Overall, this will better align inventory decisions with financial performance and corporate EGS obligations as well as regulatory compliance requirements. In addition, the significance of data ecosystems and interoperability has increased markedly.

Today, RF&R platforms connect directly with pricing, promotion, and assortment planning systems, establishing an ecosystem of planning that enables omnichannel parity. Control towers and advanced analytical dashboards give real-time transparency into network-wide performance and help planners make recommendations with actionable insights to accelerate decision-making and prompt mitigation of disruption.

The following are the key capabilities of Retail Forecasting & Replenishment (RF&R) solutions:

- **Demand forecasting:** Demand forecasting enables retailers to more accurately, quickly reason and forecast purchasing behavior by leveraging real-time transactional signals with external market forces and artificial intelligence-enabled demand sensing. Organizations are moving from deterministic forecasting to probabilistic forecasting that provides accurate short-lead spikes and seasonal trends, and new item performance. This capability allows retailers to receive demand signals based on scenarios, by category, geography, and channel, to enable a proactive inventory and pricing decision, reducing stock distortions and improving customer service levels.
- **Replenishment Planning:** Replenishment planning functionality supports the timely flow of inventory and carries out automated replenishment policies across a

distributed network of nodes. The solutions give real-time visibility into demand patterns, inventory levels, supplier performance, and in-transit capacity, and generate replenishment triggers to assist in ensuring the right size availability. The feature does have immediate impacts for businesses by eliminating the risk of lost sales, releasing working capital tied up in overstock, and reducing operational complexity. The benefits for retailers are improved service levels, timely shelf replenishment, and improved supply and demand balancing across each channel, i.e., brick and mortar as well as e-commerce.

- **Smart Inventory Allocation:** Retail Forecasting and Replenishment provides a smart allocation capability that allows retailers to dynamically allocate inventory to uplift revenue and margin potential. By using an AI-based framework for allocation rules that evaluate local demand, promotional campaigns, and channel priorities, this capability ensures that the right product gets assigned to the right location, at the right time. Businesses can minimize markdowns, avoid sending slow-moving options into overstocked stores. For fashion, seasonal products, or limited drops, smart allocation allows you to respond more quickly to demand hotspots that arise, to satisfy your customers while lowering inventory holding costs.
- **Inventory Management:** Inventory management capability enables visibility and optimization in real-time across the supply chain. Through dynamic safety stock policies and multi-echelon optimization, organizations can limit excess supply chain risk, control their service-level objectives, and reduce waste with short-life items. This capability will increase profitability while minimizing carrying costs, while providing the availability of SKUs experiencing high demand. As a result, retailers would be faced with an inventory management capability that provides responsive and sustainable inventory management that lessens demand fluctuations, provides improved omnichannel fulfillment, and enhances the shopping experience.
- **Promotions Planning and Forecasting:** Promotion planning ensures that the inventory is available upon demand, being satisfied through marketing initiatives. The systems develop expected uplift and assess promotional cannibalization as well as cross-channel impact by modeling elasticity and halo effect analytics via AI and machine learning. Retailers have insights ready to take action pertaining to promotion timing, depth of discount, and where to position inventory with the goal of optimizing the risk of losing sales to stockouts in peak promotional events and minimizing the risk

of post-promotion overstocks. This capability provides a way for organizations to optimize return on investment for campaigns by providing operational clarity, transparency, and continuity through serving their customer base.

- **Reporting, Analytics, and Simulations:** Retail Forecasting and Replenishment provides reporting, analytics, and simulation via real-time dashboards, predictive alerts, and digitally twin simulations of future sales demand, as possible risks emerge, such as lead-time volatility, upward demand in advance of promotional sales. Retailers are able to model different paths of recovery before executing their formulated strategies. The business insights provided allow businesses to be able to make data-backed decisions that meet financial goals and strategic operational commitments while meeting sustainability perspectives. This capability enables businesses to respond proactively to volatile conditions and maintain resilience, reducing misalignments between demand and supply, which will provide the business with a sustainable competitive advantage in a fast-moving retail environment.

Research Methodologies

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Evaluation Criteria

QKS Group' SPARK Matrix provides a snapshot of the market positioning of the key market participants. SPARK Matrix provides a visual representation of market participants and provides strategic insights on how each supplier ranks related to their competitors, concerning various performance parameters based on the category of technology excellence and customer impact. QKS's Competitive Landscape Analysis is a useful planning guide for strategic decision-making, such as finding M&A prospects, partnerships, geographical expansion, portfolio expansion, and similar others.

Technology Excellence	Weightage
Demand Forecasting	15%
Replenishment Planning	10%
Inventory Optimization	15%
Supply planning	10%
Smart Inventory Allocation	5%
Promotions Planning	10%
Reporting & Analytics	10%
Maturity of AI, ML, and Automation Capabilities	15%
Competitive Differentiation Strategy	5%
Vision & Roadmap	5%

Customer Impact	Weightage
Product Strategy & Performance	20%
Market Presence	20%
Proven Record	15%
Ease of Deployment & Use	15%
Customer Service Excellence	15%
Unique Value Proposition	15%

Evaluation Criteria: Technology Excellence

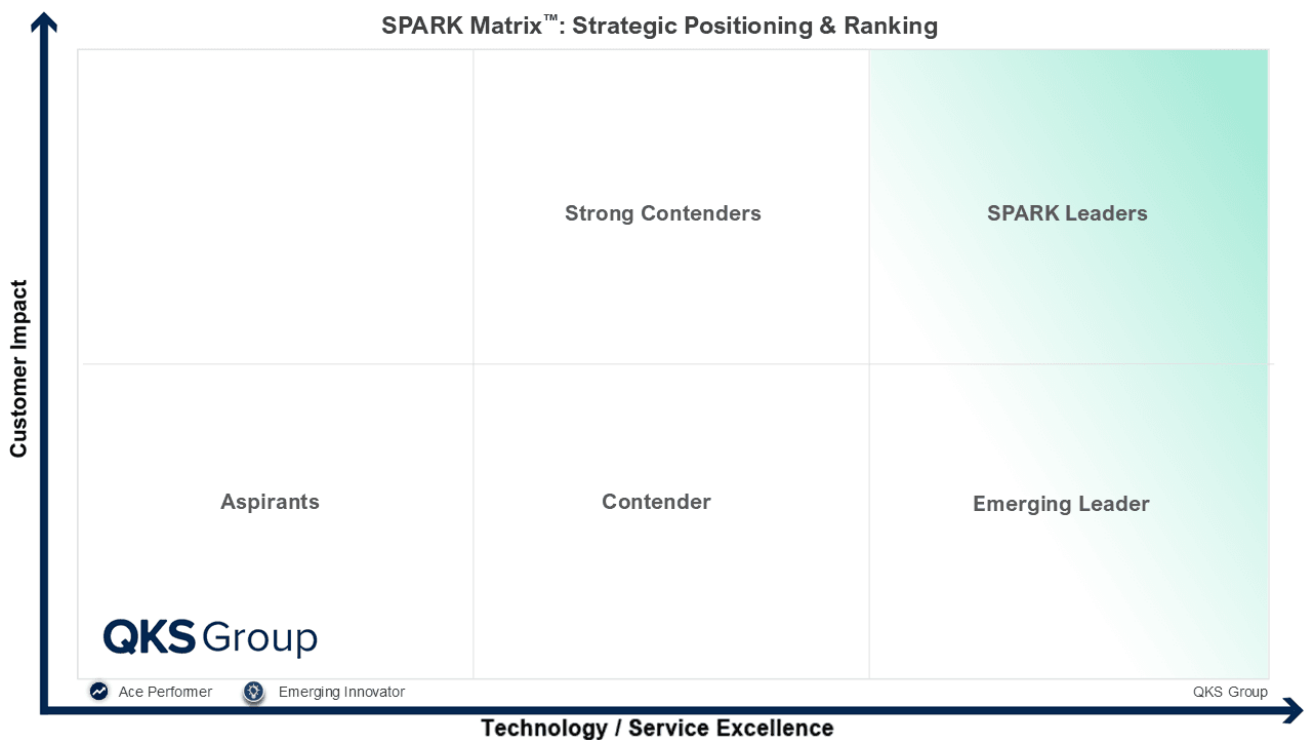
- **Demand Forecasting:** Evaluate the ability of the solution to accurately anticipate future demand, based on historic sales data, market trends, and other variables, leveraging advanced algorithms and machine learning models to improve the accuracy and dependability of your forecasts.
- **Replenishment Planning:** Evaluate the ability of the solution to automate and optimize inventory replenishment by using demand forecasts, inventory positions, lead times, and supplier constraints to ensure timely replenishment while avoiding stockouts and excessive inventory.
- **Inventory Optimization:** Evaluate the ability of the solution to optimize inventory across the supply chain by managing carrying costs, service levels, and demand variability, using data intelligence to minimize excess inventory and better inventory turns.
- **Supply planning:** Evaluate the ability of the solution to align supply and demand by planning production, procurement, and distribution activities, using resources efficiently, and aligning with business objectives and goals to maintain efficient supply chain operations.
- **Smart Inventory Allocation:** Evaluate the ability of the solution to allocate products correctly across various channels or locations, aligned with demand, inventory levels, and strategic priorities, ensuring that the right products are available in the right quantities at the right places.
- **Promotions Planning:** Evaluate the ability of the solution to plan, execute, and analyze promotional activities, ensuring that demand forecasts and stocks align, and optimize the promotional effectiveness by marrying insights from data with scenario planning.
- **Reporting & Analytics:** Evaluate the ability of the solution's reporting and analytics capabilities, including real-time visibility, dashboards that are configurable dashboards, and actionable insights.
- **Maturity of AI, ML, and Automation Capabilities:** Examine the level of depth and maturity of embedded artificial intelligence, machine learning, and all levels of automation in the vendor's platform. Assess the level of autonomous decision-making that their AI capabilities initiate, the degree of continuous learning that occurs from new data, the reduced levels of manual intervention, and the ability of their AI to adapt to changing market conditions regarding forecasting, replenishment, and exception management.
- **Competitive Differentiation Strategy:** The ability to differentiate from competitors through functional capabilities and/or innovations and/or route to market strategy, customer value proposition, and others.
- **Vision & Roadmap:** Evaluation of the vendor's product strategy and roadmap with the analysis of key planned enhancements to offer superior products/technology and improve the customer ownership experience.

Evaluation Criteria: Customer Impact

- **Product Strategy & Performance:** Evaluation of multiple aspects of product strategy and performance in terms of product availability, price-to-performance ratio, excellence in GTM strategy, and other product-specific parameters.
- **Market Presence:** The ability to demonstrate revenue, client base, and market growth along with a presence in various geographical regions and industry verticals.
- **Proven Record:** Evaluation of the existing client base from SMB, mid-market, and large enterprise segments, growth rate, and analysis of the customer case studies.
- **Ease of Deployment & Use:** The ability to provide a superior deployment experience to clients, supporting flexible deployment or demonstrating superior purchase, implementation, and usage experience. Additionally, vendors' products are analyzed to offer a user-friendly UI and ownership experience.
- **Customer Service Excellence:** The ability to demonstrate vendors' capability to provide a range of professional services, from consulting, training, and support. Additionally, the company's service partner strategy or system integration capability across geographical regions is also considered.
- **Unique Value Proposition:** The ability to demonstrate unique differentiators driven by ongoing industry trends, industry convergence, technology innovation, and others.

How to read SPARK Matrix™

The **SPARK Matrix™** by QKS Group is a comprehensive evaluation framework that benchmarks vendors across key industries based on their **Technology Excellence** and **Customer Impact**. This proprietary analysis tool provides a detailed, comparative assessment of market players, enabling businesses to make informed decisions when selecting technology partners. The matrix highlights vendor strengths, growth trajectories, and market strategies, offering a dynamic visualization of their competitive positioning. Designed to cater to the needs of decision-makers, the SPARK Matrix serves as a trusted guide for navigating complex markets and identifying the vendors best suited to drive organizational success and innovation.



- **Ace Performer** : Ace Performers are vendors that excel in operational performance based on their revenue growth potential, partnership strategy, and customer acquisition—all evaluated over the last one-year period or since the previous SPARK Matrix assessment.
- **Emerging Innovators** : Emerging Innovators are vendors recognized for their forward-thinking approach and disruptive innovations, even if they lack the scale or market penetration of more established players. This category highlights vendors with significant potential for long-term leadership in their domain, evaluated over the last one-year period or since the previous SPARK Matrix assessment.

- **Leader:** The Leader section of the SPARK Matrix represents organizations that set the gold standard in their respective industries. These vendors excel across both **Technology Excellence** and **Customer Impact** parameters, delivering best-of-breed solutions that are innovative, scalable, and future-ready. Leaders are recognized for their ability to anticipate market trends, address critical customer pain points, and deliver transformative outcomes. Their robust technological capabilities, combined with a deep customer-centric approach, position them as trusted partners for organizations seeking strategic growth and sustainable competitive advantages.
- **Emerging Leader:** The Emerging Leader section highlights organizations that are rapidly closing the gap with established leaders. These vendors exhibit a strong potential for future dominance, driven by significant advancements in **Technology Excellence** and increasing Customer Impact. Emerging Leaders often focus on niche markets or disruptive innovations, demonstrating a clear vision and execution capability. Their upward trajectory is marked by consistent enhancements to their offerings, growing market share, and an ability to deliver targeted solutions that cater to specific customer needs.
- **Strong Contender:** The Contenders section includes vendors that are establishing their footing in the market. These companies exhibit potential but may face limitations in terms of **Technology Excellence** or Customer Impact. Contenders often focus on addressing fundamental market needs and are actively investing in R&D and customer engagement strategies to strengthen their position. While they may not yet have the maturity or comprehensive offerings of higher-ranked categories, Contenders are key players to watch as they evolve and refine their strategies.
- **Aspirants:** The Aspirants section represents vendors that are in the early stages of development or are relatively new to the competitive landscape. These vendors have foundational offerings but lack the technological sophistication or customer-centric impact to compete at higher levels. Aspirants often serve niche markets or focus on incremental improvements, positioning themselves as future competitors in the space. Their journey involves building credibility, enhancing solution capabilities, and developing customer relationships to rise through the SPARK Matrix rankings.

About the Authors

Prakhar Bansal



Prakhar Bansal is a Senior Analyst at QKS Group, specializing in the Retail and eCommerce domains within the Information Communication & Technology (ICT) global market. He brings a comprehensive understanding of the rapidly evolving digital commerce landscape, with deep expertise in key trends, technologies, and market dynamics that are reshaping the retail industry, particularly in the context of digital transformation. Prakhar has a proven track record of delivering in-depth market research and strategic analysis, with a focus on emerging technologies such as artificial intelligence (AI), omnichannel strategies, retail product lifecycle management, and retail planning suites. He is proficient in evaluating vendor capabilities, assessing technological advancements, and providing actionable recommendations for stakeholders. His work supports decision-makers in optimizing eCommerce platforms, enhancing customer experiences, and driving sustainable growth.

Kumar Anand



Kumar Anand is working as an Associate Director & Principal Industry Analyst and an expert in Supply Chain Innovation, recognized for his contributions to advancing supply chain strategies. With extensive experience in logistics, procurement, inventory management, sustainability, and digital transformation, Kumar collaborates with leading organizations to enhance operational efficiency and resilience across their supply chains. As Principal Industry Analyst, Kumar leads research projects focused on supply chain management, specializing in the integration of emerging technologies such as autonomous mobile robots (AMRs), navigating

technologies, and multi-enterprise supply chain business networks. His work empowers companies to navigate industry disruptions and turn challenges into opportunities using data-driven insights and proven frameworks. Kumar holds an MBA in Operations and Supply Chain, with a career that spans impactful roles in supply chain consulting and market research. He has a strong focus on evaluating and optimizing supply chain processes for global corporations. Kumar's career also includes significant contributions to market research and strategic consulting, where he has played a critical role in assessing technology trends across domains like supply chain management, AI, and digital transformation. His work has been integral to the development of forward-looking strategies that address the evolving needs of modern supply chains. With publications in supply chain planning, supply chain execution, and supply chain robotics (AMR), Kumar's expertise is widely recognized. He continues to predict and navigate technological disruptions, crafting strategies that transform potential risks into sustainable business opportunities.