

———— **Knowledge Brief** ————  
Quadrant Knowledge Solutions

Blue Yonder is Leader in SPARK Matrix:  
Retail Forecasting and Replenishment, 2022



An Excerpt from Quadrant Knowledge Solutions  
“SPARK Matrix: Retail Forecasting and Replenishment, 2022”

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## **Blue Yonder is Leader in SPARK Matrix: Retail Forecasting and Replenishment, 2022**

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Quadrant Knowledge Solutions defines a Retail Forecasting and Replenishment solution as: “software that intelligently analyzes the historical data to seamlessly identify future demands and perform stock replenishment across the channels.” The solution of our bound supply chain, including demand planning, inventory management, replenishment planning, allocation, and promotional forecasting. The solution focuses on predicting the demand conditions based on various factors such as price, consumer preferences, and competition by utilizing AI and/or ML capabilities that facilitate the initiation of inventory replenishment and resulting in an improved order fill rate. The solution supports demand-driven item replenishment to manage inventory levels and meet customer and business targets. The solution basically by utilizing its Machine learning models can analyze the demand for a particular product in future assisting retailers to be better prepared to respond to any kind of demand situation

The solution facilitates retailers as well as supply chain professionals to innovate, expand, and optimize end-to-end supply chain networks by accurately predicting demand patterns and trends spanning the customer and product lifecycle. The solution assists retailers in efficiently planning demand based on products and their categories, locations, stores, and warehouses. The solution automates the entire demand planning and replenishment process and reduces the time spent on the manual planning process to increase the productivity of the demand planner. The solution allows businesses to easily handle peaks in seasonal demand, the introduction of new products, the production of limited quantities, and occasional events. Various retail forecasting and replenishment solution vendors are offering comprehensive capabilities, such as allocation and re-allocation, smart inventory allocation, inventory planning, statistical forecasting, promotional forecasting, management of products with short life cycles, product lifecycle monitoring, dashboard, visual analytics, reporting, and exception management. Unsold inventory takes up a lot of space that could be used for other items in high demand. Businesses are constantly concentrating on maintaining a delicate balance between the sold and unsold goods and making sure they have the exact products that customers need. The demand for specific products is drastically changing, and the trend of their adoption is also drastically changing due to shifting market dynamics. Also, retailers across the globe are emphasizing anticipating the

demand for the right product required in-store to avoid out-of-stock or overstock conditions scenarios.

Retailers examine customer data regarding past purchases, preferences, and other factors in order to understand the products that customers find compelling. Stocking such products will significantly increase customer onboarding, customer retention, and store experience quality for retailers. By utilizing AI/ML for precise demand forecasting and making tactical decisions regarding buying and assortment, supply chain managers are focusing on driving economically thriving e-commerce businesses. Additionally, supply chain managers are using these AI/ML capabilities to improve the end-to-end supply chain network and gain comprehensive visibility.

In terms of essential products, most consumer goods suppliers and established retailers face challenges from new competitors, low-cost retailers, and a contracting economy. Retail store owners frequently look for ways to reduce costs and improve their supply chain to increase their profit margins. To generate profits in the form of significant margins, retailers must concentrate on the products that move from suppliers to a physical or digital store for e-commerce. Retailers want the best strategies to distribute their products or allocate them to a specific store. In order to purchase products at the best price and timing for the appropriate channel, there should be an integrated allocation process in addition to the replenishment process.

Retailers are putting a greater emphasis on utilizing demand forecasting and replenishment solutions to optimize inventory, better predict market demand for products, and provide a better pricing strategy for an item. Organizations use demand forecasting and replenishment solutions in addition to inventory management and pricing strategy for assortment planning. To have a responsive, honed, and effective supply chain, organizations are utilizing artificial intelligence (AI), machine learning (ML), and advanced analytics. This aids businesses in making sure that product deliveries are modified based on geographic information or current delivery schedules.

Retailers are empowered by the demand forecasting and replenishment solution because it enables them to use real-time data for effectively managing the staff at the store responsible for serving customers and providing a seamless experience. Retailers combine traffic data with historical or current events and weather data to evaluate traffic in the store over a specific time period. With this, they can more

accurately predict the peak hours, stock the store with the appropriate products in large quantities, and provide dedicated staff to those peak hours.

Quadrant's research on the Retail Forecasting and Replenishment market focuses on exploring the current market scenario and market dynamics, as well as short and long-term growth opportunities across various industries and geographical regions.

The market drivers for Retail Forecasting and Replenishment market growth include Demand Sensing, Machine learning and AI, external ecosystem integration capabilities, an external ecosystem collaboration app, external data sources, and flexible architectural configuration.

Quadrant Knowledge Solutions' SPARK Matrix: Retail Forecasting and Replenishment, 2022 research includes a detailed analysis of the global market regarding short-term and long-term growth opportunities, emerging technology trends, market trends, and future market outlook. The study provides a comprehensive market forecast analysis of the global market in various geographical regions and the overall market adoption. This research provides strategic information for technology vendors to better understand the market supporting their growth strategies and for users to evaluate different vendors' capabilities, competitive differentiation, and market position. Organizations are consistently looking at demand forecasting and replenishment solutions that adapt to their supply chain workflows as well as evolving business needs and market dynamics. Moreover, organizations are also looking for a solution that enables them to efficiently design and execute omnichannel retail strategies. As the demand forecasting and replenishment solution market consists of multiple vendors with varying platform capabilities and supporting services, organizations often encounter challenges in understanding the ideal solution for their high-level business critical requirements.

The research includes detailed competition analysis and vendor evaluation with the proprietary SPARK Matrix™ analysis. The SPARK Matrix™ includes ranking and positioning of leading Retail Forecasting and Replenishment vendors with a global impact. The SPARK Matrix™ includes an analysis of the leading vendors, including Anaplan, Antuit.ai, Aptos, Blue Yonder, Data Profits, Impact analytics, Kinaxis, Logility, Logio, Manhattan Associates, Oracle Retail, o9 solutions RELEX Solutions, Retail Express, Retalon, SAP, SAS, Solvoyo, Symphony RetailAI, ToolsGroup, and Verteego.

## Market Dynamics and Trends

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The following are the key research findings of Quadrant Knowledge Solutions Retail Forecasting and Replenishment research:

- The Retail Forecasting and Replenishment market is currently in the emerging stage owing to the dynamic factors affecting the global retail scenario. Various enterprises are adopting the technology for increased forecast accuracy, optimal planning, omnichannel product availability, and optimizing customer purchasing experiences. Organizations are undergoing a major cultural shift with an increasing focus on inculcating a business and customer-centric culture, and the digital-transformation approach is often considered an initial step in achieving the same.
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- Retailers are looking for solutions providing Collaborative Planning Forecasting and Replenishment (CPFR) capability to assist them in cooperative planning, forecasting, and management of goods flows and stock between retailers and consumer products manufacturers.
- Retailers are also opting for forecasting and replenishment solutions that can accurately estimate demand for products with a short shelf life influenced by a wide range of internal and external factors, such as product placement, weather, advertisements, and public holidays.
- Organizations are prioritizing AI-driven retail forecasting and replenishment solutions that help retailers efficiently handle fresh food forecasting as well as daily & intra-day product forecasting, replenishment, and allocation. They are leveraging smart predictive algorithms that can analyze large volumes of data and incorporate spoilage forecasts leading to better product display and enhanced inventory churn. Forecasting & replenishment solutions offered by the vendors should be able to identify and interpret any deviation in the estimation due to the sudden fluctuation in fresh item demand or supply.

- Vendors are also offering promotional planning capabilities for ideation, brainstorming, and co-creation of accurate future demand planning and allocation
- Retail Forecasting and Replenishment solutions providers are significantly investing in improving their artificial intelligence, machine learning, and advanced analytics capabilities to support a wide range of existing/new use cases as well as improve the overall supply chain collaboration, real-time forecasting, distributed product availability, dynamic allocation, and intelligent replenishment.
- Continued investments in advanced analytics to gain data-driven, actionable insights to leverage actionable insights into key KPIs in customer service, inventory, production, and quality to continuously improve and drive informed decision-making.

Organizations are consistently looking at demand forecasting and replenishment solutions that adapt to their supply chain workflows as well as evolving business needs and market dynamics. Additionally, businesses are searching for a solution that enables them to effectively plan and implement omnichannel retail strategies. Organizations frequently struggle to identify the best solution for their high-level business-critical requirements because the demand forecasting and replenishment solution market consist of numerous vendors with diverse platform capabilities and support services. Vendors of retail forecasting and replenishment solutions place a strong emphasis on improving the capabilities of their technological platforms. To do this, they support out-of-the-box and self-service integration, expand retail execution channels, support a variety of supply chain management use cases, provide end-to-end inventory management, improve promotional forecasting capabilities and accuracy, and offer real-time demand collaboration functionalities.

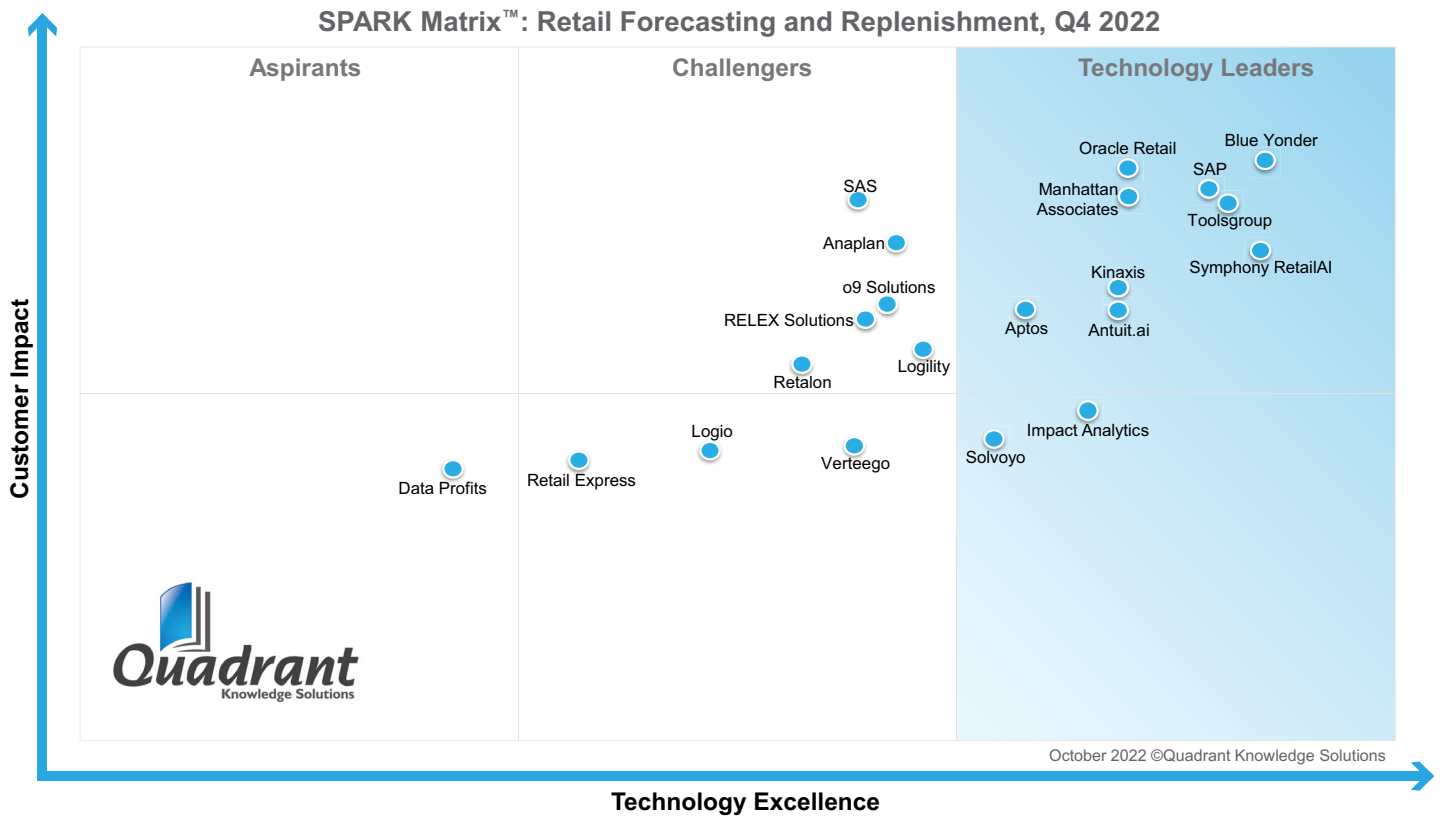
## SPARK Matrix Analysis of the Retail Forecasting and Replenishment Market

[Quadrant Knowledge Solutions](#) conducted an in-depth analysis of the major Retail Forecasting and Replenishment vendors by evaluating their service portfolio, market presence, and customer value proposition. Retail Forecasting and Replenishment market outlook provides competitive analysis and a ranking of the leading vendors in the form of a proprietary SPARK Matrix™. SPARK Matrix analysis provides a snapshot of key market participants and a visual representation of market participants. It provides strategic insights on how each vendor ranks related to their competitors based on their respective service excellence and customer impact parameters. The evaluation is based on primary research including expert interviews, analysis of use cases, and Quadrant’s internal analysis of the overall Retail Forecasting and Replenishment market.

Technology Excellence	Weightage	Customer Impact	Weightage
Sophistication of Technology	20%	Product Strategy & Performance	20%
Competitive Differentiation Strategy	20%	Market Presence	20%
Application Diversity	15%	Proven Record	15%
Scalability	15%	Ease of Deployment & Use	15%
Integration & Interoperability	15%	Customer Service Excellence	15%
Vision & Roadmap	15%	Unique Value Proposition	15%

According to the SPARK Matrix analysis of the global Retail Forecasting and Replenishment market, “Blue Yonder, with a robust comprehensive capability, domain-specific rich expertise and global coverage has secured strong ratings across the performance parameters, customer impact and has been positioned amongst the technological leader in the 2022 SPARK Matrix of the Retail Forecasting and Replenishment market.”

**Figure: 2022 SPARK Matrix™**  
 (Strategic Performance Assessment and Ranking)  
 Global Retail Forecasting & Replenishment Market





## Blue Yonder

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Founded in 1985 and headquartered in Scottsdale, Arizona, [Blue Yonder](#) offers end-to-end supply chain management and omnichannel commerce solutions. Blue Yonder offers a broad suite of solutions, including supply chain planning, supply chain execution, and omnichannel commerce. Blue Yonder provides three different Luminate™ platforms, which include planning, logistics, and commerce platforms.

The Luminate™ planning platform consists of various solutions, including demand planning, inventory optimization, network design, sales, and operation Execution (S&OE), sales & operation planning (S&OP), supply planning, production planning, allocation & replenishment, and merchandise financial management. As per QKS's scope of Retail Forecasting and Replenishment (RF&R), Blue Yonder offers these solutions as a part of its merchandise financial management and allocation & replenishment solutions. Retailers may adopt these solutions either in synergy or individually depending on their business strategies. The solutions offer comprehensive capabilities, including granular level forecast, performance tracking, promotion management & price optimization, Intelligent algorithms, consolidated view, automated distribution, and interactive workbench.

The granular level forecast offered by the solution assists organizations in individually anticipating the demand of a range of SKUs offered across various retail channels leading to better forecast accuracy. RF&R solution by Blue Yonder provides performance tracking capability along with exception management to retailers which allows them to constantly monitor the performance of any SKU and identify where items are not performing according to the plan. Retailers can further make use of root cause analytics to find alternative strategies for tackling such situations.

Promotion management & price optimization informs retailers about which product or SKU to promote in stores according to the demand and other external factors. Additionally, the tool also provides an interactive workbench to assist retailers in assessing the projected impact of allocations and deployments to make informed decisions. The solution provides a consolidated view that assists retailers in streamlining and optimizing inventory management and combining transportation plans to optimize end-to-end allocation efficiency. Intelligent algorithms offered by the solution are capable of automatically generating inventory plans based on key metrics, including sales history, on-hand inventory, safety stock requirements, and customer orders.

## Analyst Perspective

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Following is the analysis of Blue Yonder's capabilities in the global Retail Forecasting and Replenishment systems market:

- Blue Yonder provides large retailers and brand owners with an improved customer ownership experience with its end-to-end supply chain planning and execution solution. Additionally, the business provides several tools to enhance a personalized customer experience, which in turn increases customer engagement and conversion rate. By providing real-time data and insightful insights, Blue Yonder's Luminate™ platform helps retailers refocus on inventory, space, pricing, workforce, and store operations in response to recent changes in demand. Furthermore, Luminate™ Planning leverages boundaryless planning, luminate user experience, integrated planning & execution, and cognitive planning & skills optimizing the whole supply chain
- Retail Forecasting & Replenishment solution by Blue Yonder offers various key differentiators including Hierarchical forecasting, new item management, and outside-in perspective. The solution enables organizations to generate and manage forecasts at various levels of their hierarchy by including seasonality and trends resulting in the near-accurate forecast at the store/item level. Retailers can also forecast future demand for Items with very little or no historical data allowing them to proactively decide business strategies to attain optimal profitability. Also, retailers can estimate the effect of external conditions such as weather and local events on the demand for any product making them better prepared for any unforeseen situation
- AI/ML-driven Intelligent forecasting module offered by Blue yonder enables organizations to drive intelligent decision making by leveraging internal and external demand signals, corporate strategies for pricing, promotions, markdowns, and service levels, and situational factors (such as seasonality, day of the week, and day of the month) to provide accurate forecasts pertaining to demand fluctuations and dynamic consumer expectations. Retailers can also identify potential disruptions and opportunities by developing various situation and testing it in the pilot mode to gain the actual outcomes before implementing or planning strategies.

- Blue Yonder is capable of catering to a wide range of user-specific solutions for retail segments. The company serves diverse customer requirements by offering a customizable SaaS-based solution.
- From a geographical presence perspective, Blue Yonder has a major presence in North America and Europe, followed by the Asia Pacific, Middle East, and Africa, and Australia. The company has customers in a variety of industry verticals, including high-tech and semiconductor, consumer industries, automotive & industrial, retail grocery, retail hardlines, retail softlines, and third-party logistics. The business provides a vast partner ecosystem that enables businesses to utilize best-in-class tools and technologies and generate business value.
- The emerging Supply Chain Planning vendors are successfully gaining significant market traction and are strengthening their market penetration. The primary challenge of Blue Yonder is the growing competition from well-established and emerging business application vendors. However, with its strong, diverse geographical customer presence and track record to serve SMBs and large and complex markets, especially in the enterprise customer segment, Blue Yonder is expected to continue to grow its revenue across industry segments and geographical regions.
- Blue Yonder's technology roadmap is aligned towards upcoming market trends and is focused on providing an enhanced technology platform. Through a core cloud-based digital platform, the company continues to assist organizations in forecasting supply chain performance by supporting, integrating, orchestrating, and executing action across each mode of the value chain.