

Knowledge Brief

Quadrant Knowledge Solutions

Blue Yonder is a Leader in SPARK Matrix: Omnichannel Order Management Systems 2022



An Excerpt from Quadrant Knowledge Solutions
“Omnichannel Order Management Systems 2022”

Blue Yonder is Leader in SPARK Matrix: Omnichannel Order Management Systems (OMS), 2022

Quadrant Knowledge Solutions defines an omnichannel Order Management system (OMS) as ‘software that helps retailers efficiently manage and fulfill complex customers’ orders in an omnichannel environment to improve customer service experience.’ An omnichannel OMS provides unified visibility into enterprise inventory from warehouses, distribution centers, stores, and in-transit locations and performs complex order routing to enable efficient order fulfillment from the optimum location. An omnichannel Order Management System (OMS) includes a configurable workflow engine to orchestrate and optimize the complex order processing, management, and fulfillment processes to ensure efficient order fulfillment at minimum costs.

The omnichannel OMS is currently perceived as an essential technology element in the adoption of omnichannel strategies. Global retailers are increasingly adopting omnichannel OMS to manage the ever-growing complexities of customer orders and fulfillment scenarios in an omnichannel environment. Customer experience is currently seen as the key competitive advantage with ever-growing expectations of customers for a personalized experience. Brand owners are striving to provide their customers with a consistent experience in every interaction channel and device to improve customer experience. Therefore, omnichannel OMS are increasingly becoming an integral part of omnichannel retailing and are integrated with digital commerce, POS, supply chain planning, and execution systems. Omnichannel Order Management Systems’ key value proposition of providing unified visibility and availability of enterprise inventory across networks of channels enables retailers to gain a competitive advantage with efficient order fulfillment from the optimal location at minimum operations costs.

Global retailers have well understood the importance of embracing omnichannel strategies to succeed in a highly competitive environment with ever-increasing expectations around customer experience. Omnichannel Order Management Systems play an essential role in the journey toward omnichannel retailing. Traditional OMS and ERP systems are not designed to support complex order processing, management, fulfillment, and return scenarios across a diverse network of sales and fulfillment channels. These functions were performed in silos, with the inventory sources often connected to a single channel only,

resulting in poor visibility across the supply chain networks. The poor visibility and nonavailability of information tend to increase operational cost and fulfillment time, resulting in poor customer experience. Omnichannel OMS allows retailers to deliver a seamless, consistent, and personalized experience and provide the flexibility to buy anywhere, fulfill anywhere, and return anywhere scenarios. Additionally, the inclusion of a complex order processing rule engine enables the system to ensure the customers receive orders on time at the desired location and the minimum costs.

While retailers generally get inventory visibility through RFID tagging, an integrated omnichannel order management system helps retailers gain real-time holistic visibility into enterprise inventory from a range of sources, including warehouses, in-store, in-transit, distribution centers, fulfillment centers, and third-party inventory. Omnichannel OMS often connects with retailers' networks, external systems, and enterprise applications to synchronize inventory status and provide consolidated views of real-time enterprise inventory across channels in one place. Retailers can manage their vendors, store networks, and customer orders in a single place to optimize order fulfillment in an omnichannel environment. The system allows retailers to build rules per the business requirements and operational constraints to gain real-time calculations of inventory availability and available-to-promise (ATP) for omnichannel management. Omnichannel OMS also provides capabilities to orchestrate order fulfillment across the network of channels and perform intelligent order routing to determine the optimum route for order fulfillment, optimizing cost and fulfillment time. Additionally, the OMS with centralized visibility of enterprise inventory and customer orders enables retailers to handle complex sourcing scenarios and return management processes for efficient fulfillment strategies.

Post the pandemic, product features and price are no longer the primary consideration, as customer experience is becoming the primary differentiating factor for brands to sustain. Brand owners that focus on delivering more exceptional and innovative customer experiences are increasingly becoming more profitable and are winning over the competition. A customer-centric approach helps organizations to drive improvements in customer loyalty, brand image, messaging consistency, and over revenue growth.

The customer shopping journey is increasingly becoming complex and dynamic. Customers are increasingly becoming connected and knowledgeable and have easy access to product information, pricing, and reviews. Customers are

continually researching and evaluating products from their mobile devices for shopping online or in-store or buy online-pick-up-in-store (BOPIS), and others. Customers are empowered to interact with retailers across multiple channels and communicate with product reviews through various social media and sales channels. There is an increasing number of instances of strong brand building or brand failures through customer reviews.

Omnichannel Order Management Systems vendors are focusing on improving their technology value proposition by enhancing inventory visibility and segmentation, in-store technology, and leveraging advanced automation, AI and ML technologies to improve the accuracy, speed, scalability of order orchestration, and intelligent routing, and optimization processes. Several leading vendors are also enhancing their technology value proposition to offer a unified and integrated commerce platform and solutions. Vendors continued efforts in improving the awareness, and overall value proposition in terms of enhancing DOM functionalities to support omnichannel transactions are driving the adoption amongst mid-sized and large enterprise organizations beyond the retail sector.

Quadrant Knowledge Solutions' SPARK Matrix: Omnichannel Order Management Systems (OMS), 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. This research provides strategic information for technology vendors to better understand the existing market, support their growth strategies, and for users to evaluate different vendors' capabilities, competitive differentiation, and market position.

The research includes detailed competition analysis and vendor evaluation with the proprietary SPARK Matrix analysis. SPARK Matrix includes ranking and positioning of leading OMS vendors with a global impact. This study includes an analysis of key vendors, including Aptos, Arvato, Blue Yonder, Deck Commerce, Deposco, enVista, eStar, Fluent Commerce, IBM, Keros Digital, Kibo, Manhattan Associates, Mi9 Retail, MPO, OneStock, Orckestra (mdf commerce), proximis, Pulse Commerce, Radial, Salesforce, Softeon, Symphony RetailAI, Tecsys, Unicommerce, and Vinculum Group.

Market Dynamics and Trends

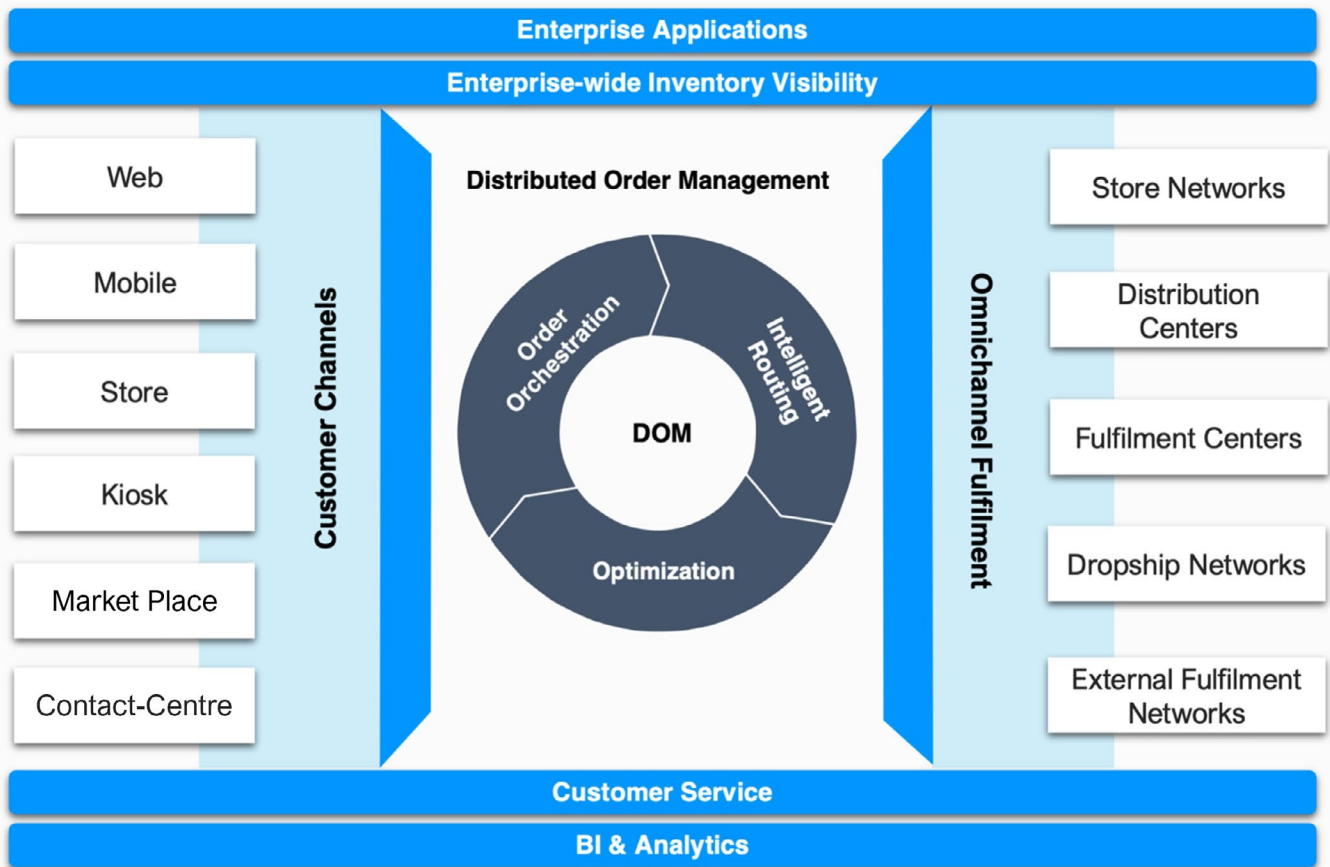
The following are the key market drivers as per Quadrant Knowledge Solutions' Omnichannel Order Management Systems (OMS) solution strategic research:

- Omnichannel OMS vendors are making significant progress in providing robust functionality to support the “buy-anywhere, fulfill-anywhere, and return-anywhere” scenarios. Vendors are increasingly providing a robust integration with all customer channels to help retailers offer their customers flexibility to buy from anywhere.
- The omnichannel OMS vendors are also investing in improving their solution's flexibility and extensibility to support future growth. The solution should allow retailers the flexibility to add any fulfillment locations and create a network of locations supporting multiple brands and geographical regions.
- OMS platform vendors are inclined to adopt the headless commerce approach to provide a robust sell anywhere and everywhere functionality. This approach is enabling retailers to accept customer orders from numerous channels, including mobile apps, AR/VR systems, marketplaces, social media, and kiosks situated at the airports, and deposit the order details from these channels into their system for fulfillment execution. Vendors are incorporating headless commerce-driven OMS platforms that are providing retailers the ability to manage their huge inventory through a unified product catalog.
- Microservice architecture is empowering OMS platform vendors to innovate their product offerings and deliver sustainable OMS capabilities in the omnichannel retail market. Many OMS vendors are shifting towards microservice-based architecture due to its flexibility in adapting to evolving and complex business operations across the supply chain network. The shift towards cloud-native microservice architecture is helping vendors as well as users to reduce system breakdown and mitigate risks that might occur during processing huge orders. It enables retailers to manage huge transactions and meet the response time during demand highs and lows.

- The emergence of the COVID-19 pandemic and the consequent social distancing norms have compelled retailers to shift from physical to digital store operations. Vendors are now focusing on offering robust OMS platforms that can accommodate an unprecedented amount of customer behavior data and handle complex logistics during this time of disruption. The necessity for maintaining social distancing has given rise to new contactless fulfillment models (contactless fulfillment), such as buy online and pick up at curbside (BOPAC), along with existing buy online pickup in-store (BOPIS), click and collect models. It is expected that the evolution of curbside pickup from buy online and pick up in-store in this global pandemic will prevail in the coming years for brands. Retailers are increasingly looking out for OMS solutions that enable them to formulate compelling BOPIS and BOPAC strategies to maximize revenue growth.
- Leading OMS vendors are actively working on building proprietary AI/ML engines or further optimizing their models to deliver enhanced inventory allocation and sourcing optimization, optimal routing, improve the customer experience, provide real-time insights, and enhanced omnichannel order fulfillment capabilities. Vendors are focusing on offering intelligent and automatic order fulfillment and improving daily supply chain activities with comprehensive reporting and real-time data-driven insights. The reporting and data-driven insights are helping retailers understand the major causes of fulfillment breakdowns, determine order patterns, make informed business decisions, and forecast item demand and supply and possible disruptions that may occur in the supply chain network.
- Omnichannel OMS systems with DOM functionalities at their core have been widely recognized as the core technology for the successful adoption of omnichannel strategies across various retail sectors, including food, nutrition, fashion, cosmetics, footwear, sporting goods, toys, home goods, toys, and such others.

Figure: Key Components of Omnichannel Order Management Systems (OMS) Solution.

»» Omnichannel Order Management System Model



Source: Quadrant Knowledge Solutions

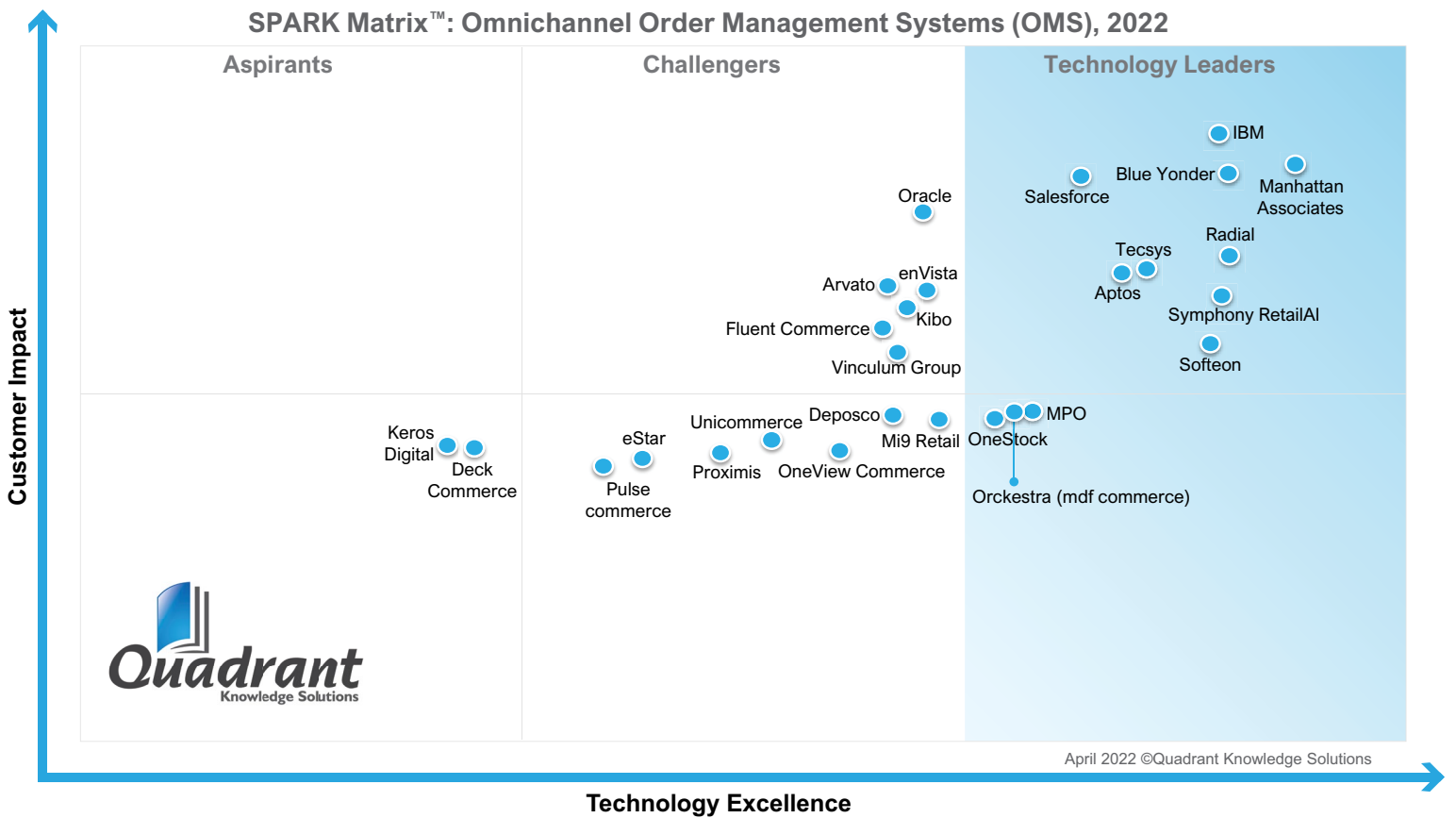
SPARK Matrix Analysis of the Omnichannel Order Management Systems (OMS) solution Market

[Quadrant Knowledge Solutions](#) conducted an in-depth analysis of the major Omnichannel OMS vendors by evaluating their product portfolio, market presence, and customer value proposition. Omnichannel Order Management Systems (OMS) 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 technology 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 OMS 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 Omnichannel OMS Platform market, “Blue Yonder’s Luminate Commerce OMS microservices provide a wide range of features and functionalities for omnichannel experiences across sales touchpoints, assisting organizations and retailers in improving the overall customer experience by providing real-time inventory availability, omnichannel fulfillment, digital fulfillment, and store operations. Blue Yonder’s, with a robust functional capability of its product OMS Product Suite, compelling customer references, comprehensive roadmap and vision, cloud-native platform, and high scalability, Blue Yonder has been positioned among the technology leaders in the 2022 SPARK Matrix of the Omnichannel Order Management Systems (OMS) solution market.”

Figure: 2022 SPARK Matrix™
 (Strategic Performance Assessment and Ranking)
 Cloud-native Application Development Services Market



Blue Yonder's Capabilities in the Global Omnichannel Order Management Systems (OMS) solution Market

Founded in 1985 and headquartered in Scottsdale, Arizona, [Blue Yonder](#) offers end-to-end supply chain management and omnichannel commerce solutions. In September 2021, Panasonic acquired Blue Yonder to offer enhanced end-to-end supply chain solutions and work collaboratively towards its shared vision of Autonomous Supply Chain™ by aggregating IoT and AI/ML technologies. In July 2020, Blue Yonder acquired Yantriks to strengthen its capabilities around real-time inventory visibility and actionable insights from click-to-collect to help retailers source, promise, and fulfill orders while ensuring an enhanced customer experience. Blue Yonder offers a broad suite of solutions, including supply chain planning, supply chain execution, and omnichannel commerce. Blue Yonder's Luminate™ platform utilizes microservices architecture, advanced analytics & insights, centralized data management, intuitive & easy-to-use user experience, configurable workflow & orchestration, control tower, AI & ML, and IoT to optimize the end-to-end supply chain operations and planning processes.

Luminate Commerce order management systems (OMS) capabilities allow businesses to plan and manage operations more efficiently. It also enables them to gain real-time inventory visibility and orchestrate operations using AI/ML insights and forecasting models. Blue Yonder's Luminate Commerce OMS suite of microservices offers comprehensive and native capabilities, including inventory visibility & availability, commitments & options, order orchestration, and store fulfillment. Luminate Commerce's unified inventory availability and omnichannel fulfillment intelligence capabilities help retailers gain real-time inventory visibility and Available-to-Promise (ATP) inventory across the network. This helps retailers to deliver optimized & personalized customer experiences by providing accurate & reliable inventory commitments, omnichannel buying & returning experiences, mitigating stock-out situations, and delivering the right product at the right time.

The Luminate Commerce OMS microservices include various features such as a single view of inventory availability, reservations & inventory protection, and omnichannel fulfillment. The single view of inventory availability feature helps retailers provide real-time inventory availability throughout the shopping process

at store locations and enterprise levels. The feature also offers a single source of product status across the platform. The reservations & inventory protection feature helps retailers deliver a strong customer experience by ensuring dynamic safety stock and protection layers to maximize inventory exposure and deliver inventory, once added to shopping carts. Additionally, the platform offers omnichannel fulfillment options to fulfill the ever-growing customer demands by catering across various channels, including ship to/from the store, BOPUS/BORIS, and more. Blue Yonder's Luminare Commerce store operations capabilities help retailers with merchandise planning, lifecycle pricing, workforce management, and store executions with sub-vertical precision optimizing planning and operations. This helps to optimize the inventory so that it meets customer demands at localized levels.

Blue Yonder's Luminare Commerce order promising capability enables retailers to have an accurate supply chain view, supply reservations rulers, direct sales, and configurable allocation & order promising policies. This will help to boost productivity, real-time order commitments, flexible allocation management, Advanced-Available-to-Promise (AATP), and Capable-to-Promise (CTP)- based promising.

Analyst Perspective

Following is the analysis of Blue Yonder's capabilities in the global Omnichannel OMS market:

- Blue Yonder's Luminare Commerce OMS microservices provide a wide range of features and functionalities for omnichannel experiences across sales touchpoints, assisting organizations and retailers in improving the overall customer experience by providing real-time inventory availability, omnichannel fulfillment, digital fulfillment, and store operations. The Luminare Commerce OMS suite also offers actionable insights, powered by artificial intelligence and machine learning, to improve operations visibility, optimize resources, and further enhance forecasting models.
- Blue Yonder's Luminare Commerce OMS microservices provide key differentiators including optimization intelligence, augmentative architecture, E2E order orchestration, AI/ML intelligence, and integrated E2E solutions. Blue Yonder's orders services solution enables retailers to manage orders across geographical, brands, and

channels by utilizing various fulfillment options, including ship from store, buy online, in-store pickup, curbside, and same-day delivery. It also offers Customer Order Visibility (COV) API-based capabilities to search, view, and modify order details. COV utilizes an unsupervised learning algorithm to identify patterns and anomalies to optimize the promising and fulfillment process.

- Blue Yonder can cater to a wide range of user-specific solutions for retail segments. The company serves diverse customer requirements by offering a customizable SaaS-based solution. The solutions offer various use cases, including automating the order orchestration process, ML-powered dynamic safety stock, accurate fulfillment dates and store inventory, same-day delivery, and more.
- Blue Yonder offers an integrated ecosystem of APIs that include various APIs for seamlessly connecting with in-built or third-party solution providers. The platform also offers an API-based microservices architecture that helps organizations augmentatively add capabilities to their existing solutions. Blue Yonder's Luminare Commerce OMS microservices are scalable for serving large and complex business operations with ease.
- From a geographical presence perspective, Blue Yonder has a major presence in North America and Europe, followed by the Asia Pacific, Middle East, Africa, and Australia. From an industry vertical perspective, the company holds a customer base across a range of industry verticals, including retail grocery, retail hardlines, retail soft lines, consumer industries, automotive & industrial, high-tech and semiconductor, and third-party logistics. The company offers an extensive partner ecosystem that enables organizations to leverage the best of breed technologies and tools and drive business value.
- Blue Yonder is aware of ongoing precedence and has built its strategy according to the dynamic market. The emerging Supply Chain order management (OMS) vendors are successfully gaining significant market traction and are strengthening their market penetration. However, with its comprehensive capabilities, compelling customer references, comprehensive roadmap and vision, cloud-native platform, and product suite with high scalability, Blue Yonder is well-positioned

to expand its market share in the global omnichannel OMS market.

- Concerning product strategy and roadmap, Blue Yonder is planning to enhance its current Luminate Commerce order management (OMS) suite with emerging technologies such as automation, AI/ML, and predictive analytics. The company is also planning strong integrations with various internal stand-alone applications to the single unified platform with a single source of truth across the enterprise. Luminate Commerce OMS integrates out of the box with Blue Yonder Transportation Management (TMS), Blue Yonder Warehouse Management (WMS), and Blue Yonder Planning to provide end-to-end omnichannel solutions across the whole supply chain. The company is also focusing on implementing autonomous updates, real-time insight & actions, store enablement, mobile-based architecture, what-if simulator, and other capabilities.