IDC MarketScape

IDC MarketScape: Worldwide Retail Commerce Platform Providers 2018 Vendor Assessment

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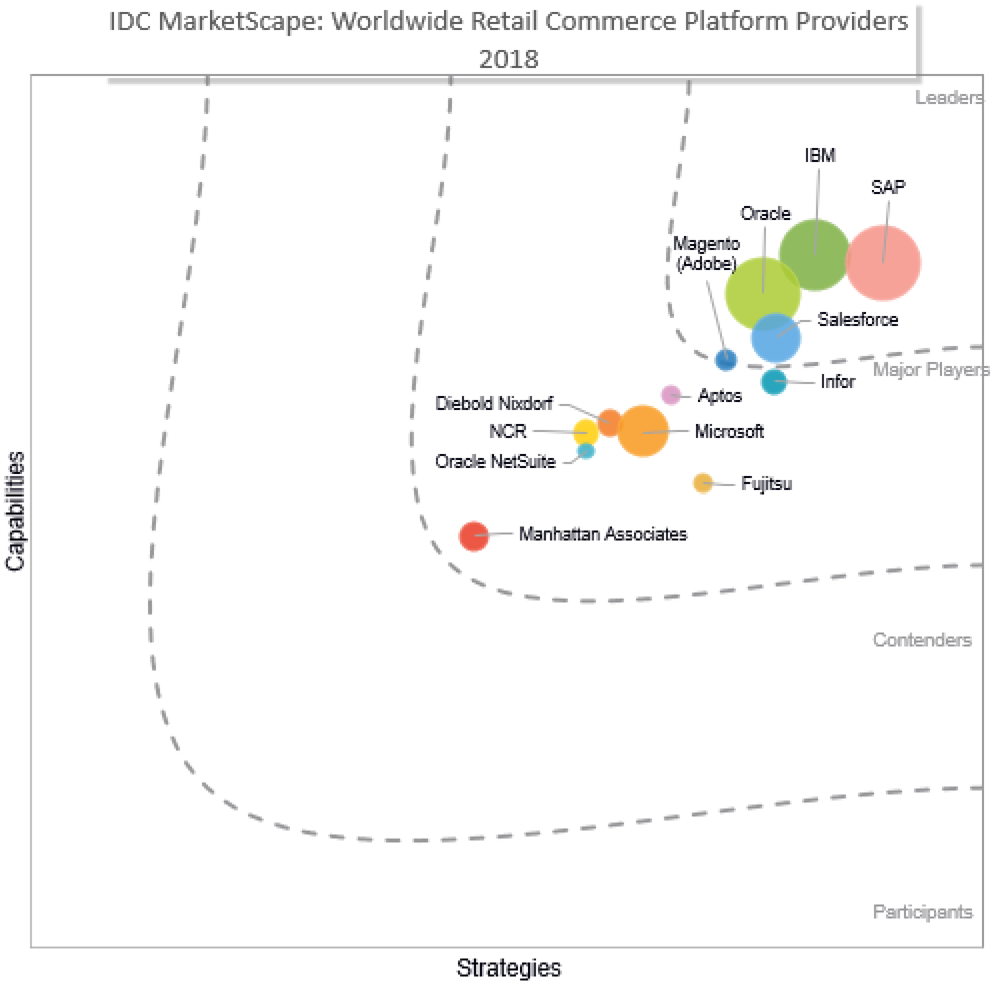
THIS IDC MARKETSCAPE EXCERPT FEATURES APTOS

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Worldwide Retail Commerce Platform Providers 2018 Vendor Assessment



Source: IDC, 2018

January 2019, IDC #US43380018e

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

IN THIS EXCERPT

The content for this excerpt was taken directly IDC MarketScape: Worldwide Retail Commerce Platform Providers 2018 Vendor Assessment (Doc # US43380018). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Retailers are facing a complex reality — they must balance traditional retail operations and omni-channel goals with the need to innovate toward commerce everywhere business models. The main challenge is the implementation of omni-channel operating models within broader digital transformation efforts. The profitability side of the omni-channel equation is the most challenging, as it's held back by increased supply chain costs, competition and promotional pressure, and legacy structures that were not designed for omni-channel commerce.

How can a retailer disrupt its own business model while remaining profitable? Based on IDC's 2018 *Global Retail Innovation Survey*, retailers are focusing on adopting new technologies, delivering innovation at scale, and accelerating customer growth. But is this feasible or realistic? New business models and innovative technologies will support the future of retail, as demonstrated by Ocado, Ulta Beauty, and Lowe's. These new models use interfaces instead of channels, provide proactive customer service and contextual discovery experiences, trace customer moments and time in place of locations, transform passive shoppers into active and engaged customers, and deliver targeted content at each junction of the customer journey, with customer experience at the heart of it all.

48% of midsize and large retailers in the U.S. and Western Europe are investing or planning to invest in retail commerce platforms (RCP) in the next 12-18 months (*Innovating Customer-Experience-Based Business Models: Results from the IDC Retail Innovation Survey 2018* — IDC #EMEA43859418, June 2018), as expressed by retail executives across IT, marketing, omni-channel sales, operations, innovation, and digital transformation. In addition to the ones they will be implementing by 2019, nearly 50% of retailers plan to adopt a retail commerce platform by 2020, which means there is — at most — a three-year window to ensure competitive advantage.

Based on our assessment of retail commerce platform vendors' offerings for this IDC MarketScape, we can highlight the following key aspects:

- **Commerce everywhere**. Retail C-suite top priorities for the coming five years revolve around innovation, digital supply chain, ecosystem enablement, and customer experience. The combination of efforts in these four macro-areas is leading retailers toward commerce everywhere business models. One of the key implications of this dynamic, for example, is that the approach to ecommerce platforms "as products" will gradually fade over next few years. This means ecommerce will be abstracted as a consumer interface, and its specific capabilities will be merged within the overall capabilities of the retail commerce platform's core commerce services. Mature vendors are already prefiguring this convergence by re-addressing their ecommerce offerings into broader retail commerce suites.
- **Retail innovation**. The retail commerce platform is an essential enabler of innovation, as it allows retailers to pilot, implement, and scale innovation at speed. However, it is crucial to consider that retail innovation goes well beyond the implementation of new technologies, and retailers should fundamentally point at business model innovation through the development of an innovation culture, the definition of an innovation strategy, execution based on a retail commerce platform, and the attainment of long-term profitable growth, building up what we call retail innovation excellence. The majority of vendors (with some exceptions) have

considerable improvement opportunities in providing retail-focused innovation services that center around retail business model innovation, rather than implementing new technologies.

- **Microservices approach**. For many years, retailers have invested in monolithic platforms that were based on traditional IT architecture, in which the modules were customized and integrated with many other legacy systems. Over the past couple of years, large retailers have started to move toward microservices-based retail commerce platforms to become more agile and have the flexibility to rapidly deploy new services and capabilities. Most vendors in this study are providing services around cloud integration and API- and microservices-based architecture transformation to support retailers in implementing, rapidly expanding, and innovating the capabilities of the retail commerce platform. Interestingly, a selection of vendors is also dedicating efforts to the improvement of their platform extension marketplaces that allow retailers to benefit from faster go-to-market for new capabilities that can be sourced directly from vendors or their partner ecosystems.
- **Artificial intelligence (AI)/machine learning (ML) analytics foundations**. The implementation of the platform will rely on a solid core, joined with a best-of-breed approach and, primarily, will leverage AI/ML analytics foundations. An intelligent core is essential to continuously gather and process real-time and streamed data from consumers, products, inventories, and partners as well as customer activity. Several vendors are developing proprietary AI platforms and attracting most of the AI talent, continually collecting data from several segments and geographies for quickly improving AI algorithm performance. These vendors are investing resources to cover specific retail domains, potentially integrating and complementing capabilities that support retail commerce platform services with the offer of specialized partners.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

In this IDC MarketScape, IDC Retail Insights assesses the capabilities and strategies of several enterprise software vendors in serving the specific needs of retail companies worldwide across industry segments (food and non-food retail). Vendors are evaluated according to their successes in designing, developing, installing, configuring, and maintaining the evolution of a retail commerce platform (Figure 2) — vendors' integrated retail offerings are also examined for overall considerations. The target platform that is taken as a reference includes all core capabilities that enable customer experience differentiation and seamless omni-channel commerce, along with the required operational efficiencies for profitability and business model agility. The core services of the platform are:

- **Customer experience services**. This helps in exploring the customer context, real-time customer journey personalization (including loyalty), and customer interface enablement through voice, image, text, and augmented reality. This set of capabilities provides adapted and consistent interface enablement across current and future consumer services, whether human or digital. Customer experience services also support contextual customer journey personalization, leveraging all data — regarding customers, products, location, the internet of things (IoT), and third party — and processes by composing and delivering highly dynamic services.
- **Commerce services**. This set of capabilities provides a single, unified engine to process transactions, from order capturing though configuration and payments to delivery setup.
- **Order-fulfilment services**. Retailers get fulfilment optimization through network-based fulfilment, fulfilment objectives and KPIs (e.g., margin optimization, delivery speed depending on customer), efficient delivery execution, and returns management.
- **Content optimization services**. This set of capabilities provides content management and adaptive, personalized content distribution.

A retail commerce platform relies on a cloud-first architecture (with possibility of on-premise, or public, private, hybrid cloud delivery, when necessary) and provides development services and API-based integration with enterprise services, data services, and consumer services, while delivering business logic and retail commerce services for four core capabilities. At the same time, it's leveraging artificial intelligence, machine learning, or an advanced analytics foundation. In addition to this, the retail commerce platform provides proprietary or third-party-sourced development services that allow retailers to address the areas of application modernization, development paradigm, code packaging shift, and cloud deployment.

To be included in this report, IDC Retail Insights analysts stipulated that vendors should meet the following minimum criteria:

- It should have worldwide geographic coverage. The provider demonstrates evidence of strong market penetration through direct presence and knowledge of U.S., EMEA, and APAC business contexts. The provider must be able to support global retailers in their activities and expansion across mature and emerging markets.
- The vendor must support clients in designing, developing, installing, configuring, and maintaining systems, applications, or platforms that run their businesses. It needs to deliver software (and hardware, when available) regarding the core services of the retail commerce platform: customer experience services, commerce services, order fulfillment services, content optimization services, including real-time integration services. Furthermore, the provider must be able to deliver the platform as a cloud-first solution (with possibility to deliver on-premise, or as public, private or hybrid cloud, when necessary). The vendor also has the capability to provide AI/ML analytics foundations embedded in the four core services.

According to *IDC's Worldwide Digital Transformation Use Case Taxonomy, 2018: Experiential Retail* (IDC #US44092118, July 2018), IDC defines experiential retail as the digital mission of the retail industry, with the subsequent strategic priorities that support that mission, the programs that will be initiated to satisfy the priorities, and the funded use cases that will be implemented under those programs. The vendor must deliver capabilities and skills that are required to implement the following relevant use cases:

- Strategic priority: Omni-channel commerce
  - Program: Seamless and frictionless commerce
    - Relevant use cases: Omni-channel commerce system, frictionless content realization
  - Program: Intelligent fulfillment and returns
    - Relevant use cases: Omni-channel order orchestration and fulfillment, real-time inventory management
- Strategic priority: Omni-experience customer engagement
  - Program: Next-generation customer care
    - Relevant use cases: 360-degree connected customer management, augmented customer support
  - Program: Autonomic conversational engagement
    - Relevant use cases: Augmented social marketing, augmented content optimization
  - Program: Hyper-personalized engagement
    - Relevant use cases: Contextualized marketing, augmented promotion optimization, omni-channel marketing optimization
- Strategic priority: Digital supply chain optimization
  - Program: Autonomic supply network optimization
    - Relevant use cases: Dynamic supply network management, augmented forecasting and planning

    - Program: Digitally optimized fulfillment operations
        - Relevant use cases: Predictive network inventory orchestration
- Strategic priority: Operational scale and agility
    - Program: Mobile enterprise
        - Relevant use cases: Mobile inventory information management, mobile customer engagement

Vendors can fulfill one strategic priority gap – and eventually enrich some capability that is part of their services – through proven collaborations with external partners.

Provider must have a relevant experience in retail industry software solutions implementation in the broadest possible set of industry processes and segments; providers with no relevant experience will not be included.

ADVICE FOR TECHNOLOGY BUYERS

IDC believes a retail commerce platform is an important milestone in making retail businesses digital businesses of today and the future of commerce businesses and to enable the innovation strategy. As your organization evaluates and plans investment for introducing or enhancing its commerce platform, we recommend considering the following:

- Rethink core systems and move toward a unified and data-centric digital retail commerce platform approach.
- Accelerate retail commerce platform investments to achieve successful innovation implementation, customer experience differentiation, and omni-channel execution at speed and at scale. Select a partner that has proven experience in implementing at least three components of the platform: customer experience, commerce, and order fulfillment services.
- Implement an AI/ML foundations road map that embeds advanced analytics, machine learning, and AI capabilities right into the application components of the platform, as and when necessary. Retailers should prioritize the selection of vendors that have developed a proprietary AI platform, taking advantage of their broad ecosystem to support retail commerce platform services.
- Don't think only about channels and omni-channel. Abstract customer interfaces and engagement input (text, image, voice, video, AR) within the platform to allow more rapid delivery of consumer services and more efficient and personalized execution of customer journeys. Customer experience differentiation is built on a new way to segment customer data and deliver dynamic experience services to consumers. In this context, marketing and advertising represent the last mile to increase the customer knowledge and engagement across the entire customer journey. Retailers should prioritize vendors that provide capabilities and offer services for managing marketing and advertising strategies as part of customer experience strategies.
- Prioritize the selection of vendors that accompany the retail commerce platform core offering with an offering for innovation services. These services should be centered around business model innovation and on supporting retailers in building a companywide innovation culture and strategy, having technology as one of the enabling instruments of retail innovation and of long-term profitable growth.
- Design integration services among the four core components of the retail commerce platforms and to/from enterprise services, consumer services, and data services. An API- and microservices-based architecture should support the implementation and rapid expansion of retail commerce platforms' capabilities. Prioritize the selection of retailers that offer a platform extension marketplace with an appropriate retail catalog and demonstrated ease of integration of third-party services.

VENDOR SUMMARY PROFILES

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

Aptos

According to its analysis and buyer perception, IDC positioned Aptos as a Major Player in this 2018 IDC MarketScape on Retail Commerce Platform Vendors.

Aptos is a software provider with headquarters in Atlanta, Georgia. Founded in 1972, Aptos, Inc. (formerly Epicor Retail Solutions) announced its official launch on June 17, 2015, as an independent company and new brand – following its spin-off from Epicor Software Corporation – and has approximately 1,300 employees globally. It has over 1,000 retail customers with a concentration in specialty soft goods and hard goods as well as department stores. Aptos' main geographical markets include the U.S., the U.K., and Canada – its presence in EMEA has been expanded following the TXT acquisition in 2017 and direct hiring in the region.

Between 2017 and 2018, Aptos has been investing in the development of a microservices-based retail commerce platform. The vendor is prioritizing use cases related to commerce services and is planning to also extend the microservices approach to order fulfillment and customer experience services between 2019 and 2020.

Aptos Enterprise Order Management (EOM) gathers capabilities referred to order fulfillment services such as sales (e.g., order change, order split), shipments (e.g., from warehouse, store, or drop-ship partner), returns, credits, and integration to online marketplaces and price comparison engines. Integrated to EOM are point of sale (POS), customer relationship management, and loyalty applications. Furthermore, these applications are integrated to Aptos' enterprise applications for merchandising/inventory management, sales audit, digital commerce, warehouse management, and analytics.

The vendor places Aptos CRM as the starting point of customer experience services. This application allows retailers to manage customer information (demographics, transactions, and interactions) in a single database accessible from multiple employee interfaces at store (through Aptos POS) or at enterprise level. Aptos offers customer experience management capabilities through its own developed functionalities (e.g., campaign planning and management, promotion planning) or through integration to third-party solutions.

Commerce services are offered with the capabilities of Aptos Digital Commerce and of Aptos POS (comprising Aptos Store and Aptos Mobile Store). The integration of these components to Aptos EOM provides real-time inventory visibility and allows retailers to manage multiple use cases (27 identified by Aptos) such as combining in one transaction products available in store and online, buying online and picking up in a store, managing store checkout, accessing customer information, and managing store workforce. Aptos Digital Commerce includes a product information management (PIM) functionality – with responsive design capabilities for mobile customer experience – and provides integration to major payment processing gateways (e.g., Google Checkout, Checkout by Amazon, and PayPal).

Content optimization services rely on integration to Aptos PIM that can be accessed by other systems (e.g., kiosks and mobile apps) using web services to offer content in a store environment.

Aptos POS and Aptos CRM are available in both on-premise and software-as-a-service (SaaS) models. Aptos Digital Commerce and Aptos EOM are deployed in cloud, and many Aptos clients are running them on AWS.

Strengths

- Aptos' execution of its microservices architecture strategy is strengthening its overall offer flexibility, as it matches with retailers' ongoing preference to implement the retail commerce platform with a best-of-breed approach. Aptos is completely focusing its activity on the retail industry, and its customers recognize its solid industry expertise and the ability to deliver microservices at speed and meeting customization expectations.
- After the acquisitions completed between 2014 and 2016 (QuantiSense, ShopVisible, BT), the acquisition of TXT is instrumental to appropriately execute on Aptos' global expansion strategy. It is worth reporting a customer's opinion, according to which the latest acquisition not only strengthens Aptos's geographic coverage capabilities, but it is also an important asset for further aligning the company's road map to the needs of retail industry.
- Also noteworthy are Aptos' plans to expand its services portfolio. For example, the vendor will provide an offering focused on business consulting services and launch a marketplace for third-party-developed applications that will be relying on the overall microservices architecture.

Challenges

- As Aptos is focusing its efforts on delivering microservices for the existing portfolio of applications, the vendor's offering for the core services of the retail commerce platform has remained almost unchanged over past quarters — even if, for example, some advancements have been made in the collection of data from customer interfaces such as voice and augmented reality. Aptos must demonstrate to existing customers and potential customers that the investment in the microservices architecture will be capitalized with the broadening of Aptos' own capabilities (organically or through further acquisitions) and through the timely and effective launch of the mentioned applications marketplace.
- Regarding the AI/ML analytics foundations, Aptos is not yet addressing them with proprietary capabilities or official third-party sourcing and is focusing on a business intelligence reporting approach. This is an attention point on the overall Aptos offering, and the vendor will need to share a clearer strategy (e.g., key innovation partners that will be involved) and road map for embedding AI/ML capabilities across the core services of the retail commerce platform. Related to this, another attention point is how Aptos will execute on the strategy to deliver third-party-sourced IoT services for which clear plans and timeline have yet to be shared.

APPENDIX

Reading an IDC MarketScape Graph

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

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

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

Vendor footprint, depicted by the size of the bubble, is based on IDC Retail Insights' best estimates of the vendor revenue on a global basis for software (together with hardware and IT services, when available) related to the retail commerce platform.

IDC MarketScape Methodology

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

Market Definition

In this IDC MarketScape, IDC Retail Insights assesses the capabilities and strategies of several enterprise software vendors in serving the specific needs of retail companies, worldwide, across industry segments (food and non-food retail). Vendors are evaluated according to their success in designing, developing, installing, configuring and maintaining the evolution of a retail commerce platform (Figure 2). Vendors' integrated retail offerings are also taken into account for overall considerations. The target platform that is taken as a reference includes all the core capabilities that enable customer experience differentiation and seamless omni-channel commerce, along with the required operational efficiencies for profitability and business model agility. The core services of the platform are:

- **Customer experience services**. Helping to explore the customer context, real-time customer journey personalization (including loyalty), and customer interface enablement through voice, image, text and augmented reality. This set of capabilities provides adapted, yet consistent interface enablement across current and future consumer services, whether human or digital. Customer experience services also support contextual customer journey personalization, leveraging all data — regarding customers, products, location, IoT, and third-party — and processes by composing and delivering highly dynamic services.
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The retail commerce platform relies on a cloud-first architecture (with possibility of on-premise, or public, private, hybrid cloud delivery, when necessary) and provides development services and API-based integration with enterprise services, data services, and consumer services, while delivering business logic and retail commerce services for four core capabilities. At the same time, it's leveraging artificial intelligence, machine learning, or an advanced analytics foundation. In addition to this, the retail commerce platform provides proprietary or third-party-sourced development services that allow retailers to address the areas of application modernization, development paradigm, code packaging shift, and cloud deployment.

Customer experience is a key priority, and most retailers globally feel the pressure to adopt experience-based business models, prioritizing investments in specific areas such as hyper-personalization and real-time contextual interactions. Customer experience-focused organizations are reinventing how commerce works, combining commerce with interactive activities to create more meaningful connections with customers and, ultimately, to boost sales.

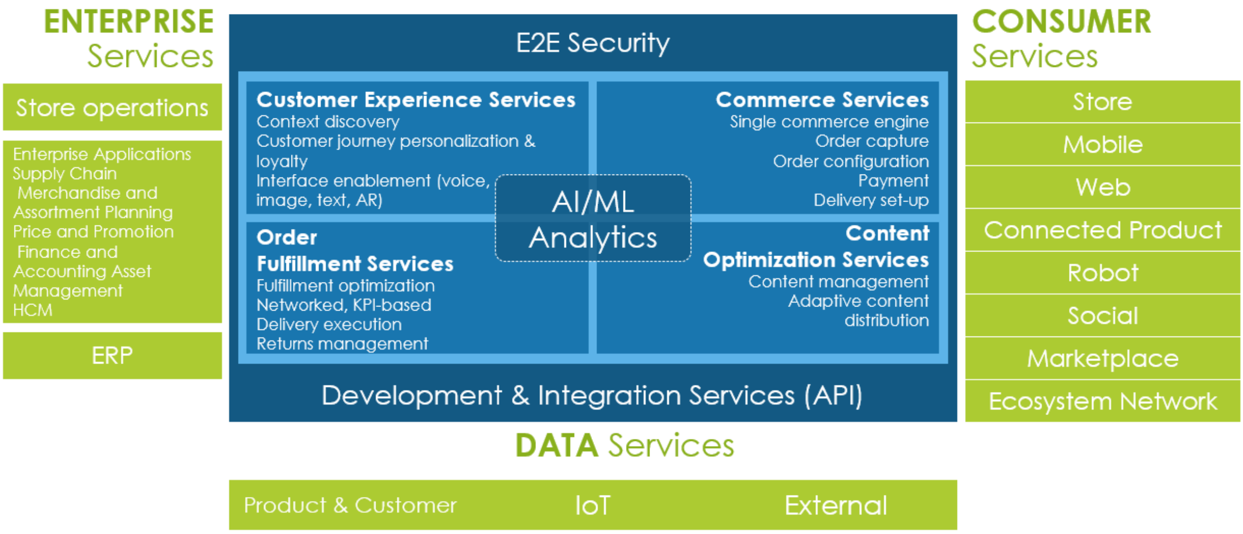
As of today, the main challenge for retail organizations remains to drive profitable growth without compromising service, and continuously innovate their business models to remain competitive in the

"Future of Commerce." To succeed, retailers should invest in a retail commerce platform that combines customer journey personalization, omni-channel commerce, and fulfilment intelligence with current and future consumer interfaces, data services, and enterprise services. IDC believes the retail commerce platform is a milestone in making retail companies the digital businesses of today and the future of commerce businesses of tomorrow.

Retailers cannot rely on legacy processes since traditional IT infrastructures and applications architecture won't enable them to provide exceptional customer experience and commerce performance. It's important for retailers to rethink their core systems and move toward a unified and data-centric digital retail commerce platform approach.

FIGURE 2

IDC Retail Commerce Platform: Conceptual Architecture



Source: IDC, 2018

LEARN MORE

Related Research

- *IDC FutureScape: Worldwide Retail 2019 Predictions* (IDC #US44384318, October 2018)
- *IDC MaturityScape: Retail eCommerce 1.0* (IDC #US41453217, September 2018)
- *IDC's Worldwide Digital Transformation Use Case Taxonomy, 2018: Experiential Retail* (IDC #US44092118, July 2018)
- *Retail Commerce Platform 2018: Achieving Omni-Channel Profits and Driving Retail Innovation* (IDC #EMEA43792118, May 2018)
- *IDC PeerScape: Retail Customer Experience Practices for Enabling Personalization at Scale* (IDC #US42174017, March 2018)
- *IDC MarketScape: Worldwide Retail Omni-Channel Commerce Platform 2017 Vendor Assessment* (IDC #US41453016, April 2017)

Synopsis

This IDC MarketScape assesses the capabilities and strategies of several key enterprise software vendors in serving the specific needs of retail companies worldwide across industry segments (food and non-food retail). Vendors are evaluated according to their successes in designing, developing, installing, configuring, and maintaining the evolution of a retail commerce platform. The target platform that is taken as a reference includes the core capabilities that enable customer experience differentiation and seamless omni-channel commerce, along with the required operational efficiencies for profitability and business model agility.

"Retail is evolving at an unprecedented speed, and retailers' operating models and technology platforms need to keep pace. The retail commerce platform is what can deliver omni-channel profits in the short-term and commerce everywhere business models in the future," said Andrea Sangalli, associate research director, IDC Retail Insights, IDC Europe. "Retail software vendors are rapidly evolving their retail commerce platform strategies and investing in the expansion of the capabilities of their platforms' core services, especially around customer experience and order fulfillment services, AI/ML analytics foundations, and open API- and microservices-based architecture, also leveraging platform extension marketplaces."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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