





IHL Retail Executive Advisory Program



IHL has been advising the retail community (vendors and retailers alike) since 1996 in retail information technology evolution and strategy. Initially our focus was on point of sale software, hardware and in-store technology. But over the years our focus has grown to cover all of retail information technology including commerce solutions, ERP, merchandising/supply chain, sales and marketing, and business intelligence.

Over the years we've amassed a tremendous amount of primary- and secondary-source data through first-hand consulting experience in this pursuit. From this ever-growing knowledge base of offerings like our <u>Sophia Data Service</u>, the <u>Worldview IT Sizing Forecast Model</u> and custom research projects, insight has been gained at a level unparalleled in the industry.

The **IHL Insight Market View** series of research studies build upon this knowledge and adds analyst insight to graphically display vendor positioning, drive for innovation and projected growth.

The goal of this report, as well as the entire <u>IHL Retail Executive Advisory Program (REAP)</u>, is to provide the retail community with the most detailed and complete picture possible of the retail technology landscape. We do this to assist retailers in vendor selection and to help the industry understand the trends, drivers and barriers that are fundamentally transforming our industry. It is our intent that this body of research continue to grow in depth and influence over the coming years. Undoubtedly, changes will be made and vendor positions will change. Some vendors will bring innovative solutions to the industry that will see their clients flourish and experience new heights of their own success. Their positions on the various IHL Insight Market View charts will improve. Likewise, others, maybe many others, will miss the transformation happening all around them and stumble and fall. Their newfound position in the industry will also be documented on the charts.

Retailers are encouraged to use these charts in discussions with their vendor partners. It is our intent that they provide unique insights into vendor strategy and provide thought-provoking questions as we all move forward and prosper in the Era of Intentional Innovation.

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Introducing OMS



The foundation for a successful Unified Commerce strategy for a retail enterprise is a highly capable and configurable order management system (OMS). Such a system is able to look at an order independently of the channel from which it originated. OMS is both foundational and linked with the five key technology families, namely:

- Store Systems
- > E-Commerce
- Business Intelligence (BI) / Analytics
- Merchandising / Supply Chain Management (SCM)
- Sales & Marketing.

OMS is the natural extension of key POS functionality such as inventory visibility (across the enterprise), ordering from other stores, return of online purchases, ship from store, order online from the POS, click and collect, and store-to-store transfer. The broad functionality required by OMS is extended even further when one considers the additional permutations for ordering and return brought by online and phone / catalog sales.

Here, Unified Commerce, with a foundation built upon OMS, acts as an architectural construct to overcome the constraints caused by channel evolution. The payoff is tremendous and given the very thin IT budgets retailers work with, expect this transition to be much slower than anyone wants, especially the vendor community.

The last 6 months, more than any in the history of OMS, has highlighted the need for broad and robust OMS functionality. For quite a few retailers, OMS was and will continue to be the lifeline between business success or failure.

Retail OMS Software Market



The Retail Software Market continues healthy worldwide expansion for two main reasons: retail in emerging economies is growing, and enterprise retailers are re-architecting their systems to support Unified Commerce (the systems that enable the procurement, sale and delivery of merchandise independent of channel) and Cloud computing (along with its cost efficiencies). IHL projects the worldwide software market (software, cloud and on-premise maintenance) will grow 76% from \$71.0 Billion in 2019 to \$124.7 Billion in 2024. For OMS software, we project the worldwide market will grow 96% from \$800.6 Million in 2019 to \$1.57 Billion in 2024.

A more granular look at this growth requires an understanding of the shift in the type of software that retailers expect to use. While we still project packaged software and software maintenance expansion, it is the growth in the Cloud-related Software-as-a-Service revenue (which includes the change from packaged on-prem software to SaaS) that is driving a great deal of the increase. Total SaaS revenue is projected to grow 245% from \$19.3 Billion in 2019 to over \$66.6B in 2024. For the same timeframe, OMS SaaS revenue is expected to grow 308% from \$218.7 Million in 2019 to \$893.6 Million in 2024. For readers of last years' document you'll notice the significant uptick. This is primarily due to COVID-19 acting as an accelerant in the transition from in-store to online buying.

For those using this document to make potential OMS selections, we recommend the following questions be considered:

- 1. What are the tradeoffs between on-premises and SaaS (both single and multi-tenant) solutions? Even beyond SaaS, look to those vendors that have a well thought through strategy and roadmap supporting microservices.
- 2. What is the vendor's roadmap for Artificial Intelligence and Machine Learning? What is functionality is available today, what is coming, and when will it be available? Is it customized or embedded? Whose API's is it based upon? We continue to be very bullish on AI and believe some of the greatest ROI wins are around those solution components utilizing AI/ML
- 3. Which integrations are off-the-shelf versus custom? Depending upon your roadmap and current solutions, explore the tradeoffs between using the same vendor for POS and E-Commerce software, and using multiple vendors. Many of the vendors summarized in this report offer broad suites supporting many of the Unified Commerce pillars.
- 4. Citing use cases, how flexible are the OMS solutions you are considering so you can ensure a specific vendor's solution can grow as you grow, and support the pace of change you need?
- 5. How robust is the shipping optimization engine? We believe this is one of the greatest sources of OMS ROI. We also believe this is one of the greatest areas of disparity in functionality among vendors. During the discovery process, spend time to understand the strengths and weakness, as well as growth plans within the shipping optimization engine.

Retail OMS Software Market (continued)



For retailers reviewing this report, most of the charts and tables are meant to highlight specific components of functionality that we deem to be critical in our review of the competitive landscape. Should you have additional questions, we're quite happy to schedule a call to review any aspect of the report that you'd like to understand further. The analysis uses over 1,000 known installs meaning instances where we know Vendor A's is supplying OMS software to Retailer B. While we may not know the answer, we're happy to find it out for you or provide you a list of similar competitors which may have like functionality requirements and who they are using for OMS.

On review of the vendor positioning charts, one will note that the majority of vendors are either in, or close to the upper right-hand quadrant. Each chart represents the top 15 by category, and by no means is exhaustive, thus leading to some concentration.

On the market value bar charts, we only include regional charts for NA and EMEA, along with worldwide. These two regions represent over two-thirds of the WW OMS market. Their overarching share is why we've included those breakouts.

All revenues presented in this analysis are estimates. They are highly researched and validated to the extent possible, but they are in fact estimates. We have a rather complex and data intensive process for estimating vendor OMS revenue with many assumptions. As a general explanation we use the sum product of our vendor market share from our Sophia Worldwide Database against our Worldview IT spend model grouped segments to yield our estimates. Given the very large data repository of known OMS installs, we believe this yields a statistically significant estimation.

For multiple vendors we were able to validate that our process was close to a known number. Additionally, vendor retail revenue, regional distribution and solution distribution are all estimates as well. For a handful of vendors that have shared exact values with us, we believe that our approach achieves a very high degree of accuracy.

When reviewing our market size projection charts and vendor estimates these include on-premise software, SaaS, and on-premise SW maintenance only. We do not include any systems integration (SI) revenue. It is just too complex to estimate with a high degree of accuracy. Factors such as labor rates, customization, percentage internal versus partners and customer complexity vary wildly so we stay away from the integrative services piece of this in our vendor revenue estimates. Clients may feel free to schedule a call with us and we can provide market guidance relative to recommended SI factors for calculating TAM (total addressable market) sizing. For a given vendor, the addition of SI revenue could be up to, or exceed in some cases, our combined software revenue estimates.

Retail OMS Software Market

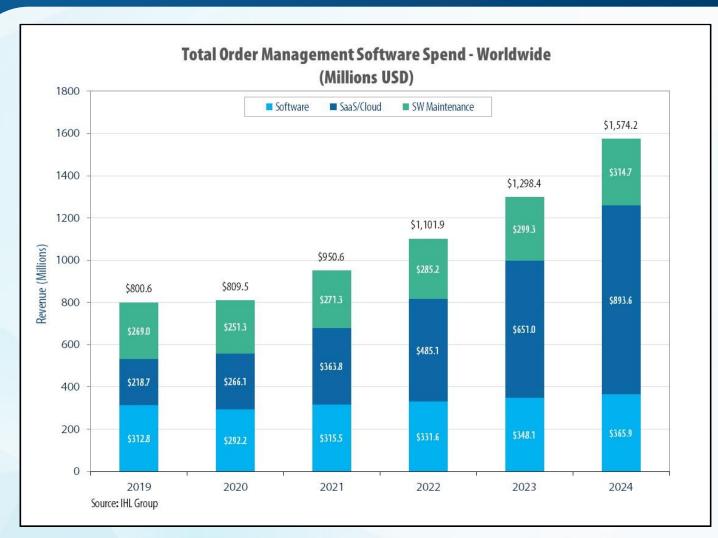
A brief look at the overall retail OMS software market size and value.





Total Retail OMS SW Spend - Worldwide



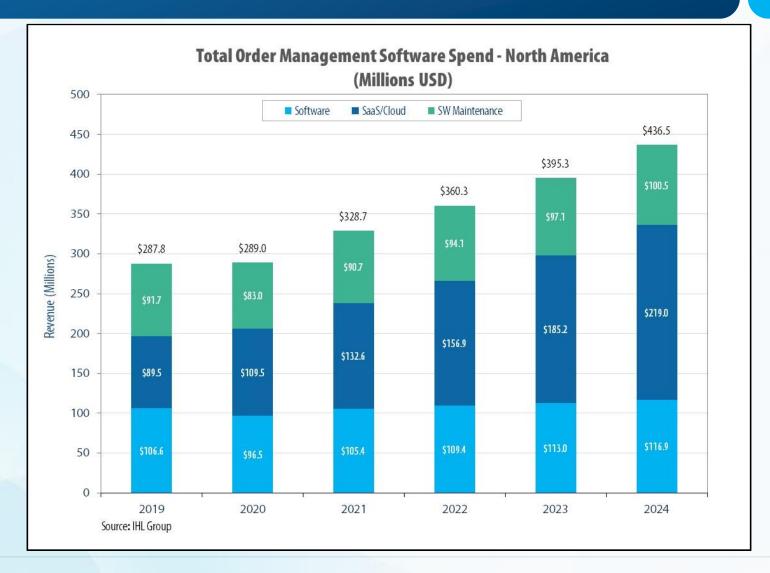


IHL Projects that the worldwide Order
Management Systems market will grow 97% from 2019 to 2024 to 1.57b in annual sales. The majority of growth will be in SaaS implementations which are expected to grow 308% during the period.

These growth figures, although impressive, understate the overall impact of this software on retailers. Much as the operating system is the base component of software that helps a computer operate, OMS has quickly become the core system Unified Commerce success in predicated upon.

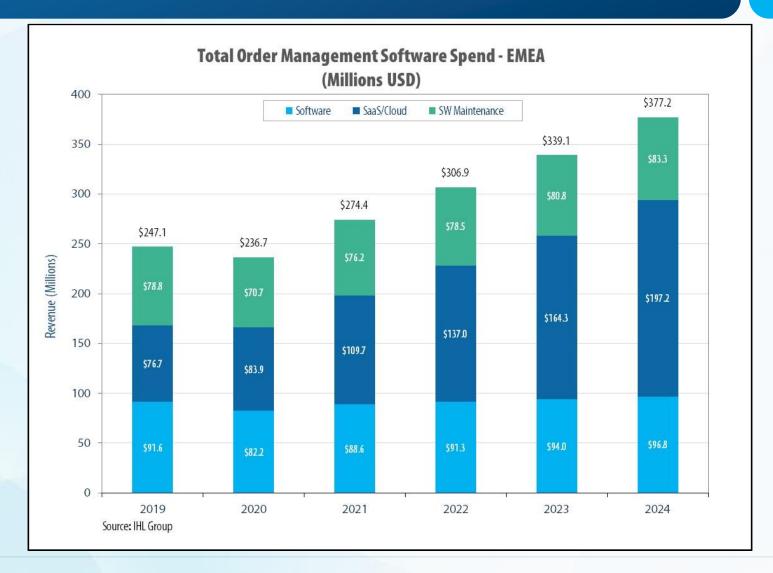
Total Retail OMS SW Spend - NA





Total Retail OMS SW Spend - EMEA



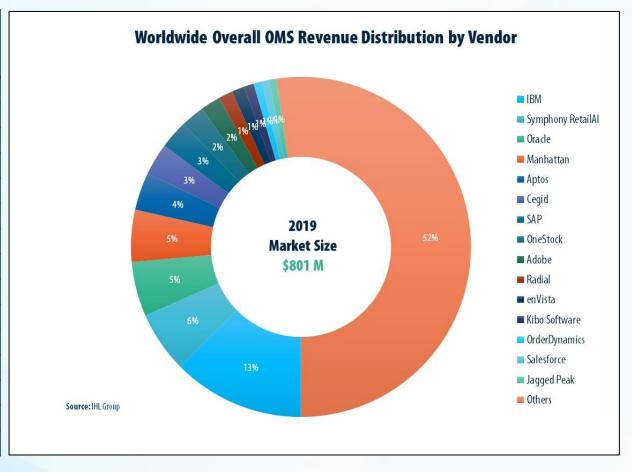


Worldwide OMS Rankings





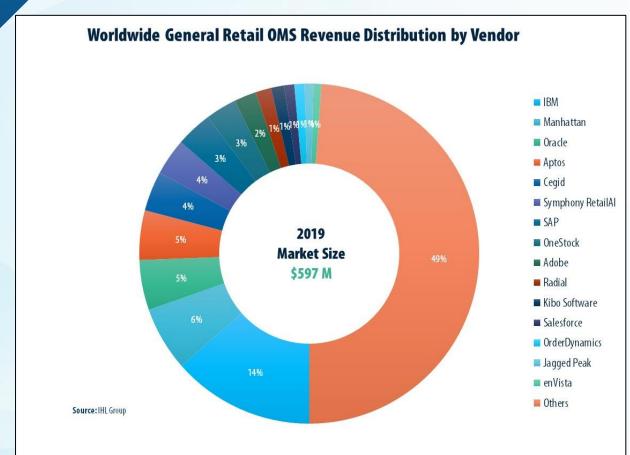
Vendor	Total SW/SaaS (\$USD)		
IBM	\$100.6m		
Symphony RetailAl	\$46.7m		
Oracle	\$41.5m		
Manhattan	\$39.6m		
Aptos	\$28.7m		
Cegid	\$24.4m		
SAP	\$21.7m		
OneStock	\$18.0m		
Adobe	\$15.2m		
Radial	\$10.9m		
enVista	\$9.5m		
Kibo Software	\$7.5m		
OrderDynamics	\$6.2m		
Salesforce	\$5.9m		
Jagged Peak	\$5.3m		



Worldwide OMS Rankings-General Retail







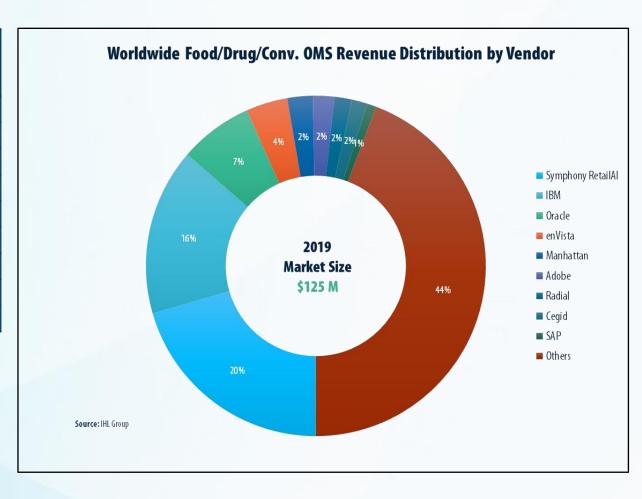
Vendor	Total SW/SaaS (\$USD)	
IBM	\$80.8m	
Manhattan	\$36.6m	
Oracle	\$28.4m	
Aptos	\$28.1m	
Cegid	\$22.5m	
Symphony RetailAl	\$20.9m	
SAP	\$20.6m	
OneStock	\$17.7m	
Adobe	\$12.6m	
Radial	\$8.8m	
Kibo Software	\$7.4m	
Salesforce	\$5.8m	
OrderDynamics	\$5.8m	
Jagged Peak	\$4.9m	
enVista	\$4.6m	

Worldwide OMS Rankings-Food/Drug/Conv.





Vendor	Total SW/SaaS (\$USD)
Symphony RetailAl	\$25.6m
IBM	\$19.8m
Oracle	\$8.8m
enVista	\$4.9m
Manhattan	\$3.0m
Adobe	\$2.6m
Radial	\$2.1m
Cegid	\$1.9m
SAP	\$1.1m





The change in the software landscape over the past handful of years has been nothing short of dramatic, with new best-of- breed players, Mobile applications and Cloud solutions.





Key Trends & Drivers



> Retail Strong, but COVID!

North America

- 2019 sales grew 3.5%, and 2020 was up 6.6% thru February. 2020 outlook was great, and the retail apocalypse narrative was vanishing.
- COVID hit in March, and 2020 sales will decline 7.6%.
- Mall-based retailers, especially Dept Stores and specialty soft goods retailers, were hammered.
- Table Service Restaurants, Lodging and Entertainment venues all expect sales declines >25%.
- FDCM retailers (Food, Drug, C-Stores & Mass Merchants) expected to be up 9.7% for the year.

o EMEA

- Prior to COVID, Western Europe drove growth;
 Hospitality, Grocery and Mass led while Dept. Stores struggled.
- The key EMEA countries saw retail sales decline 0.7% in 2019, driven by Euro countries.
- COVID hit this region hard, accounting for ~40% of worldwide deaths.
- Going forward, expectations for 2020 are for retail sales to decline 6.9%.

o APAC

- Retail sales were up an average of 5.9% in local currencies for the key APAC countries in 2019.
- COVID started here, and China, supplier to the world, shut down for 2 months.
- Going forward, expectations for 2020 are for retail sales to decline 3.7%.

> Retail Strong, but COVID! (Con't)

o LATAM

- Retail sales were down an average of 1.8% in local currencies for the key LATAM countries (MX, BR, CO, CL, AR, PE, VE) in 2019.
- COVID killed 400+ per million in this region, and 92% were in the key countries.
- o 2020 retail sales are expected to decline 6.9%.
- Prior to COVID, the largest economies in LATAM were already in a period of turmoil and trouble.

Landscape Changes Post COVID

- As the pandemic rocked the world, consumer behavior and the response of retailers changed everything.
 - Four months of inventory in the supply chain vanished in 2 weeks for some items (hand sanitizers, disinfecting wipes, frozen pizza, yeast)
 - Online shopping growth increased fourfold.
 - Mall-based retailers had no access to their in-store stocks, so they were unable to sell them online.
 - Worldwide, \$285B in wealth transferred from GMS & Hospitality to FDCM.
 - In North America alone, \$250B in wealth transferred from small retailers to large ones.
 - The timetable for the deployment of new customer journeys (BOPIS, Click & Collect, etc) was accelerated to help meet increased online demand.
- Retail sales plunged, and recovery to 2019 levels is expected to take until 4Q21 for APAC, 2Q22 for North America and EMEA, and 1Q23 for LATAM.

Key Trends & Drivers, con't



> Key OMS Development Areas

- A central commerce hub that handles customer, product and supplier data to provide "one version of the truth" of the order.
- Migration from on-prem to SaaS, especially multi-tenant built with microservices-based architecture.
- Tighter call-center integration with POS / mPOS, OMS and E-Commerce.
- Increased vendor investment in email and SMS technologies to better inform of customer order status.
- Enhanced UI can mean a lot of things, but vendors continue to devote significant effort to modernize their user interface.
- Global retailers need modular / expandable currency, taxation and language features. The largest (read "global") vendors are ahead of the game here, and they perform better with integration times.
- Bottom line, retailers are looking for a single version of customer information across channels, so the in-store experience looks more like that found online.

What We've Seen Out There

- Some vendors offer 'Try Before You Buy' programs in response to COVID. While this might have no short-term impact on revenue, it likely will create great customer good will and long-term returns.
- Vendors continue to invest in incorporating Al/ML into their solutions. That said, the ability to articulate and quantify end user ROI still seems to be ambiguous at best.
- We continue to see significant incorporation of additional data streams intended to facilitate more profitable order brokering / disposition.
- Grocery has seen the most significant technological transformation due to COVID. OMS, along with E-Commerce, has played a pivotal role in this change, but currently there are few vendors competing for Tier I grocery OMS.
- Retailers are making significant investments in supply chain which give greater inventory visibility and more fidelity around Available to Promise (ATP).
- Retailers have shown a greater emphasis on facilitating customer interactions in a contactless fashion.
- OMS has been a lifeline for some retailers, especially in the Specialty space. Those vendors with OMS, along with a full suite of solutions, will thus take an elevated position within the ISV 'pecking order' of their prospective clients due to Board level visibility that OMS now garners.

Key Trends & Drivers, con't



Customer Journeys: Optimization

- The retailer's response to changes in consumer behavior has resulted in a number of new customer journeys like BOPIS,BORIS, Curbside (with geofencing considerations), Click & Collect and Local Delivery, among others.
- Some retailers deployed these journeys as part of their quickpivot during the pandemic. In some cases retailers had no time to optimize these journeys; they needed to get something, anything, deployed as soon as possible, even if it was not specifically part of the CIO's roadmap. Solutions based on Microservices seemed to perform best and offered the most to clients.
- Data collected so far shows margin losses of between 4.2 -8.2 points when the customer journey is not optimized. This is not sustainable going forward for retailers in the FDCM segments, so we expect they will be devoting considerable energy to optimizing these journeys going forward. OMS will play a big part here.

Profitability is Multi-Channel

- Tied to the previous bullet, the most successful retailers are engaging customers across multiple channels and multiple customer journeys.
- Retailers will be working overtime to maximize profit and optimize performance across all channels once the dust settles from COVID. OMS will go a long way to enhance Inventory Visibility throughout the enterprise and on into their supplier lines.
- o Competition in these areas will only increase.

Notable Mergers & Spin-offs

- o Epicor acquired ShopVisible (1/15)
- Epicor spun-off Aptos (6/15)
- MI9 acquired Raymark (11/15)
- Salesforce acquired Demandware (7/16)
- Infor acquired Starmount (8/16)
- Oracle acquired NetSuite (11/16)
- Aptos acquired TXT Retail (7/17)
- Infor acquires OMS assets from Arvato (2/18)
- Adobe acquired Magento, (5/18)
- Infor divested from the OMS market (2020)

Barriers



Economic Recovery

- The biggest barrier is the overall economy. Retail Sales were up strong for the first 70 days of 2020 but came to a screeching halt for the General Merchandise and Hospitality Segments in March.
- Food/Drug/Mass Merchants, Supercenters, Electronics and DIY Stores are seeing sales gains over 20% since COVID-19 with E-Commerce sales especially strong.
- The single greatest barrier to this market is recovery of sales and opening of stores.

> Inflation Risk

 With central banks flooding the markets with cash to make sure cash is flowing, businesses survive, and people are fed, this could lead to inflation that could slow recovery.

GDPR and Other Data Protections

 Because we are dealing with the merging of customer data and item/order data, retailers must go the extra step to make sure this data complies with data protection standards. This can slow the vendor selection and deployment process. Retailers would be wise to consider these issues in any software installation.

Inventory Distortion, a \$1T Problem

 Inventory Distortion is the combination of out-of-stocks and overstocks, and as such, it represents a serious inefficiency within retail. Not only do the overstocks tie up capital unnecessarily (and result in decreased margins due to discounting), but the out-of-stocks represent sales that are lost to the competition. Both impact the bottom line, as well as customer perception and ability to respond to challenges.

Government's Best Intentions

• The US Government delivered a pair of solutions to keep people employed during the pandemic. One was a forgivable loan program aimed at small businesses, and the other was an extension of benefits aimed at those unemployed due to the pandemic. In spite of the Government's best intentions, they forced retailers into a position of having to compete with them for labor. Further, both solutions were ripe with examples of massive fraud and corruption.

> Clean Data, and Lots of It

The way forward for successful retailers is to use AI / ML on store operational issues. Trends and patterns that can be acted upon are more quickly discerned by AI / ML than by humans. But this requires that retailers have access to data from sources both inside and outside the enterprise. The key aspect of this is the need for data that is clean; if the retailer fails in this, then the investment in AI / ML will simply enable them to make bad decisions more quickly.

1H Linsight market view

Positioning Maps

Just providing software revenues for individual vendors doesn't paint the whole picture. In this section, we attempt to provide a more accurate representation of the leading software players' true position in the market.









The IHL Insight Market View Positioning Map displays vendors by innovation, market strength, and market share. It is a 3-dimensional view of the market that takes into consideration the scale of the vendors involved and not just direction. So the reader gets to see size of strength, not just position of strength.

Over 75% of the ratings and positioning come from completely objective measures leveraging our WorldView IT Sizing and Forecasting model and our Sophia data service which tracks installs by vendor. Only 25% of the total positioning is in any softer measure such as review of innovation or customer satisfaction.

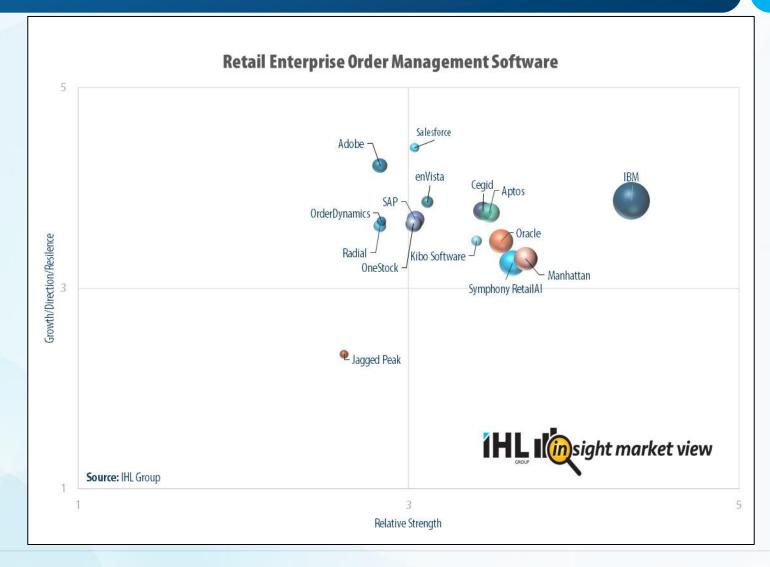
Here are the categories that make up each axis.

X – Market Strength	Y – Growth/Direction/Resilience	Z – Market Share
Global Reach	Revenue Growth Trend	Market Share
# Retail/Hospitality Accounts	Customer Satisfaction	
Size of Accounts	Stability/R&D Commitment/Funding	
Innovation	Unified Commerce (BI, Commerce, Merch/SCM, Sales & Mktg, Store Systems)	
Market Share Growth		

Total OMS Software-Overall

Top Providers

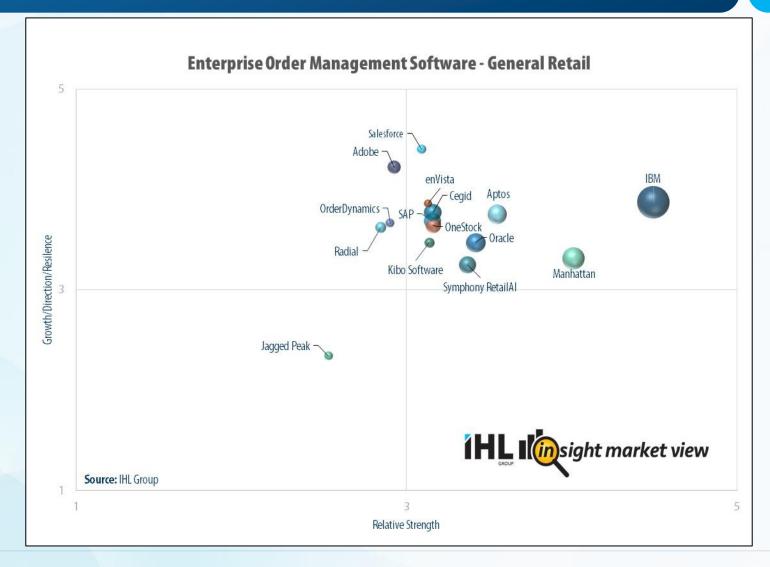




Total OMS Software-General Retail

Top Providers





Total OMS Software-Food/Drug/Conv.

Top Providers





OMS Providers Key Differentiators

Here we offer granularity on the solutions offered by the key vendors.





Leading Commerce Providers

Overview



As we've noted, OMS is a foundational system for today's and tomorrow's retail enterprise. Closely coupled to OMS, and of the same strategic importance are the core commerce systems, POS and E-Commerce. Retailer and Vendor investment over the last five years has resulted in a tremendous amount of innovation in architecting these three systems to work together with greater efficiency and increased functionality.

Depending upon their size and history, retailers will choose either integrated systems or best-of-breed. There is no one-size-fits-all approach. For retailers seeking counsel in these areas, our REAP Advisory reports are a ready resource for that advice. Based upon those reports, we wanted to provide a summary of the key vendors in the key areas and their predominant deployment tier. For inclusion in the attached charts we applied the following criteria by solution:

- **E-Commerce** at least 15 WW accounts at that level
- OMS at least 10 WW accounts at that level
- POS at least 15 WW accounts at that level

This is based upon known accounts in IHL Group's <u>Sophia Retail Data Service</u> covering the leading 5,000 retailers in the US and EMEA. In reviewing this chart, one should not consider this to be an exhaustive list of the only vendors that might service accounts across the three groupings charted here. In <u>Sophia</u> we have over three hundred unique vendors providing solutions in these three areas across North America and Europe.

Additionally, one should not infer that because a vendor is listed in Tier II that they are not able to service Tier I clients. Similarly, a vendor in Tier III should aptly be considered for Tier II and potentially Tier I opportunities.

Furthermore, if a vendor had 8 Tier I OMS accounts, and several others in the Tier II space, they were put in the Tier II block. For retailers wanting specific details on client installs used in this analysis, please feel free to schedule a call with us.

One final note: These observations are based upon our research or public information vendors have shared with us. Some vendors have either chosen not to provide feedback, or company rules prohibit them from sharing. It is our experience that vendors freely share references with retailers, so we recommend that retailers query a broad array of vendors prior to forming their short list.

Leading Commerce Providers General Retail



	E-Commerce		OMS		POS / mPOS	
Tier I	IBM/HCL Adobe Oracle	Salesforce SAP Smith WebCollage	Aptos enVista IBM Manhattan	Oracle SAP Radial	Aptos Diebold Nixdorf Manhattan NCR	Oracle Flooid SAP/GK SW Toshiba GCS Veras Retail
Tier II	Radial	WooCommerce	Kibo Commerce OneView Cegid Group Symphony RetailAl	Adobe Tecsys Salesforce	enVista	Cegid Group
Tier III	Amplience Aptos Kibo Commerce	Kiosked Shopify	Jagged Peak	MI9 Softeon	Epicor Island Pacific	LS Retail MI9
Tier IV-V	Bigcommerce MI9	Square enVista	Microsoft		Celerant Lightspeed Revel Systems	Shopify Shopkeep Square

Leading Commerce Providers Food / Drug / Convenience Retail



		E-Con	nmerce	OMS		POS / mPOS	
	Γier I	IBM/HCL Instacart InterShop	Adobe Oracle SAP	IBM SAP enVista	Symphony RetailAl	Diebold Nixdorf Extenda Fujitsu Gilbarco HITEC	NCR Oracle Flooid SAP/GK SW Toshiba GCS
-	Γier II	Salesforce	WooCommerce			Pinnacle	Veras Retail
	Γier III			Un	ata		
-	Γier IV-V					Revel S	ystems

OMS Characteristics: Architectures



	On-Premise	Single Tenant Cloud	Multi-Tenant Cloud	Microservices (Single/Multi)
Adobe			✓	✓
Aptos		✓	✓	✓
Cegid	✓	✓	✓	✓
enVista		✓	✓	✓
Fujitsu			✓	✓
IBM	✓		✓	✓
Jagged Peak		✓	✓	✓
Kibo Commerce			✓	✓
Manhattan		✓		✓
OneView Commerce		✓	✓	✓
Oracle	✓	✓		Partial
Order Dynamics			✓	✓
Radial		✓	✓	✓
Salesforce			✓	
Symphony RetailAl	✓	✓		✓

OMS Characteristics: Cloud Hosting

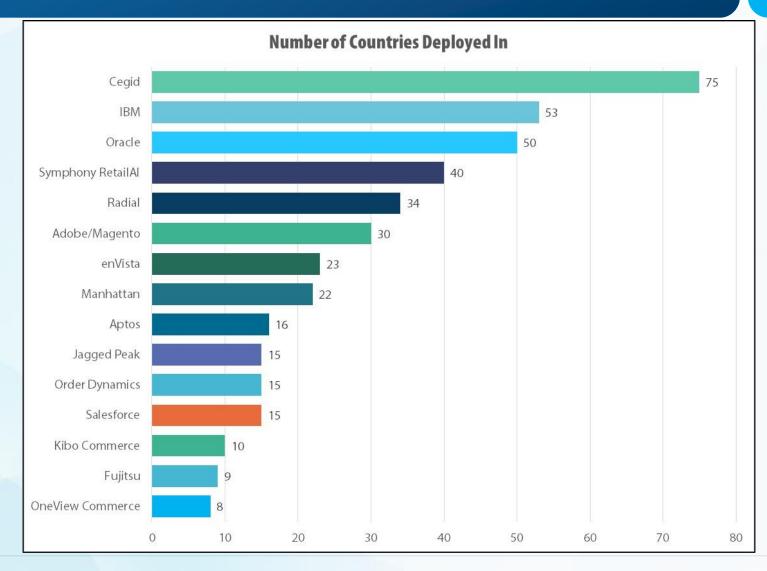


	AWS	Azure	Google	Other
Adobe	✓			
Aptos	✓	✓	✓	
Cegid	✓	✓		Rackspace
enVista	✓	✓		
Fujitsu				Salesforce
IBM	✓	✓	✓	Own
Jagged Peak	✓			Own
Kibo Commerce	✓			
Manhattan			✓	
OneView Commerce	✓	✓		
Oracle				Own
Order Dynamics		✓		
Radial				Own
Salesforce				Own
Symphony RetailAl		✓		

tro Definitions

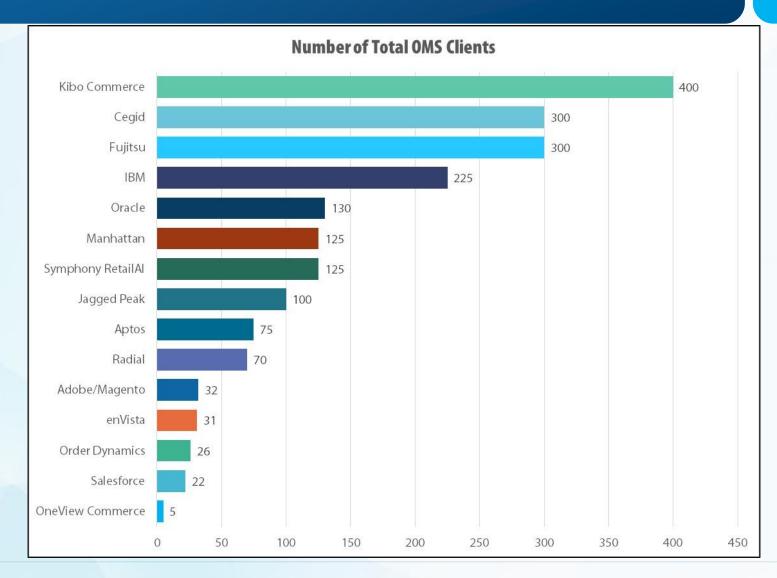
OMS Characteristics: Country Experience





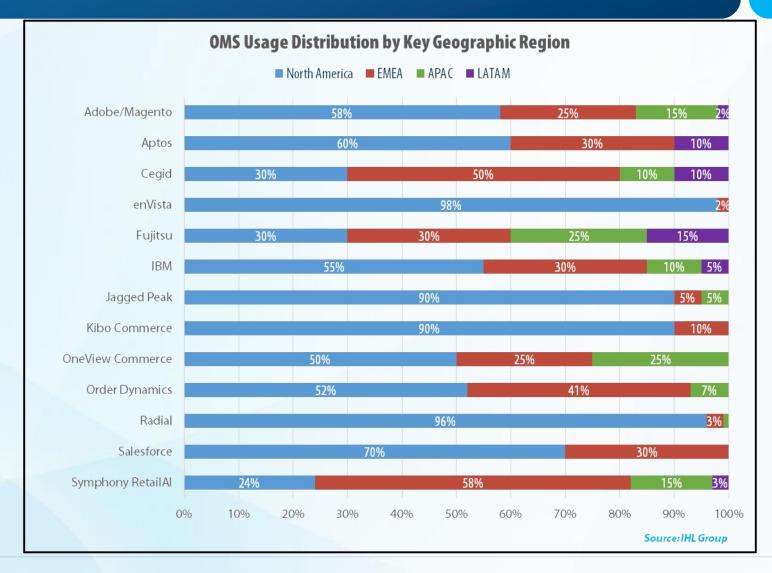
OMS Characteristics : Total OMS Clients





OMS Characteristics: Geography







Key Vendors COVID Response



OMS has been front and center for all retailers, large and small. During the pandemic it is hard to imagine a world without either E-Commerce or OMS. We as a society are fortunate that such advanced tools are available to retailers and hospitality providers, who in turn can provide an effective response. The digital maturity of retailers runs the gamut; some were well prepared to respond (and pivot, if necessary) to the overnight change in consumer behavior. But far too many retailers were simply not ready, and COVID acted as an accelerant. With long term business health (and in some cases business survival) hanging in the balance, technology solution providers have responded well, especially when it comes to quick implementation packages.

The following notes are a summary of the key responses from the vendors. These responses range from free trials to accelerated development roadmaps to working long hours to implement in short periods of time, and a whole host of others. We felt it important to highlight all of the strategic work that the vendors summarized in this report have done to bridge many gaps. This list is my no means meant to be all inclusive but rather viewed as highlights of sometimes very broad strategies and extensive offerings.

Adobe:

BOPIS and Curbside now directly integrated in Magento Commerce 2.4 so that functionality is pre-integrated

Aptos

 Aptos EOM Quick Start enables retailers to roll out buy online, pick up at curbside (BOPAC), buy online, ship from store (BOSFS) and other popular omnichannel capabilities in a matter of weeks.

Cegid

• In one of the more impressive and customer friendly initiatives, Cegid offered a six month, no cost, try before you buy to customers to help support them during the pandemic for agile implementation packages related to enable stock-out items form the store, click & collect, e-reservation, ship from store, single stock vision etc.

Key Vendors COVID Response (continued)



enVista

Noted their platform and implementation methodology typically already supports implementation times on the low end
of the industry average.

Fujitsu

- They have launched Glovia OM quick start options. These equip retailers with the software and technology needed to enable BOPIS, curbside, and smart locker fulfillment; and various other touchless customer experiences.
- The quick start options include three packaged offerings that enable customers to get up and running in potentially as
 quickly as two days. In another example of being a partner during the current crisis they are offering 10 user licenses of
 Glovia OM free of charge for 6 months.

IBM

- They offered nine 90-day no-charge offers which included functionality associated with their OMS and Inventory Visibility products.
- They also offered a 'minimalist' version of their OMS solution at a reduced price point.
- They also offered holiday readiness packages which were normally reserved for the fall and supported enhanced volumes using container-based scaling and deployment architectures.
- IBM also released Sterling Inventory Control Tower which combines a new inventory-focused dashboard with a targeted subset of capabilities from the existing Supply Chain Insights and Inventory Visibility offerings.

Key Vendors COVID Response (continued)



Kibo

- Kibo is offering a 30-day implementation of its Inventory Visibility microservice.
- Kibo is releasing a Curbside Pickup solution designed to optimize 2-way communications between businesses and their customers during the pickup process. This solution is a standalone offering with a lightweight implementation that can be completed in 3-4 weeks.

Manhattan

· Accelerated the release of their contactless curbside pickup capability.

OneView

• They have introduced OneView Pickup Anywhere to empower retailers to serve customers when, where, and how needed and enables them to tailor the experience quickly.

Oracle

In fewer than 30 days they have been able to incorporate BOPIS and Curbside.

Radial

• They tout pre-integrated and pre-configured functionalities that allow for the entire solution, within a tightly predefined scope, to enable a client to launch in an expedited project ranging from 4 to 6 weeks.

Key Vendors COVID Response (continued)



Salesforce

- Curbside and Store Pickup Quick Start, customers are able to get a complete solution that enables buy online pickup in store or curbside capabilities up and running in as little as three weeks.
- Salesforce Order Management is also included in the Quick Start Commerce for D2C Consumer and Essential Goods, allowing the launch of a D2C commerce site in only 2 weeks. The Quick Start Commerce for Grocery and QSR allows companies to sell essential grocery and food online for curbside pickup in just four weeks. Salesfoce, in the commerce space, has not traditionally operated in either grocery or QSR. This expansion of strategy, though on the low end of the value chain, should be noted.
- They have a website dedicated to their broad array of Quick Start offerings: https://www.salesforce.com/campaign/quickstart-commerce-solutions/



The summaries which follow are based upon interviews with vendors and retailers. This is not meant to be exhaustive, but highlights either those items emphasized in the interview, or items that we felt were differentiators relative to an OMS selection.

Adobe:

- 1. Magento's acquisition by Adobe greatly expands support across additional pillars of unified commerce. Adobe brings both leading marketing and analytics product in conjunction with Magento's leading commerce tools.
- 2. Adobe basically wrote the business case for transitioning from an on-premise to cloud business model and we expect the new ownership will greatly accelerate cloud adoption from existing Magento enterprise clients across all product families.
- 3. Their OMS was built from the ground-up as a multi-tenant SaaS offering.
- 4. The Magento commerce product will be expanded from 2 offerings (Enterprise & Community) to five different offerings which will allow for more granular market segmentation and likely help accelerate adoption of the OMS product.
- 5. Hosting is currently only available through Amazon Web Services (AWS). Azure as an option is forthcoming and not a surprise given Adobe's significant partnership with Microsoft.
- 6. One of the market leaders in both B2C and B2B E-Commerce, and over 125 of those are Tier I retailers.
- 7. Their OMS is supporting BCB clients as well, which is close to 10% of their customer base.
- 8. Their E-Commerce strategy (with a Community addition for the SMB space and an Enterprise product) gives them fertile ground to grow their OMS business.
- 9. OMS and store inventory are one application.
- 10. OMS is installed in every region of the world and in over 20 countries.
- 11. Their reported integration times were among the longest of all respondents, which will likely garner some attention and resources from the new ownership. he 6-8 month OMS integration time typically includes the full Magento Commerce suite.
- 12. Current out of the box POS integrations are limited to Ebizmarts (Tier III/IV product).
- 13. Their OMS system can support grocery as they actively have some grocery clients. The product is not currently able to do substitutions, but makes substitution recommendations through other OMS functionality. Substitution is capability to be added.
- 14. Current development efforts include a microservices based platform.



Aptos:

- 1. Following the acquisition of ShopVisible (January 2015), which was primarily a Tier III-V offering, Aptos now has in excess of 20 clients with over \$1 billion in revenue. The acquisition by Goldman Sachs will likely continue to fuel their OMS growth as it is an area of R&D emphasis.
- 2. Aptos offers over 140 use cases that are integrated across Aptos applications for buy, fulfill and return across channels.
- 3. Solution includes catalog/call center support
- 4. No shipping optimization engine currently available, but does have rules-based order routing engine.
- 5. Though not required, most OMS customers utilize Aptos POS
- 6. SaaS OMS can be either single or multi-tenant
- 7. Supports both B2B and B2C
- 8. While Aptos One (their microservices based platform of the future) has only been offered as a product since 2018, it is showing immense popularity and adoption interest.
- 9. Large existing customer base in North America with likelihood of significant growth in EMEA following TXT acquisition. Also have several OMS customers in LATAM.
- 10. While no current use of Al/ML, this is a roadmap item for consideration as Aptos will place a major focus on determining how be to incorporate Al/ML across the suite of solutions this year.
- 11. They support of broad array of E-Commerce integrations including: Salesforce Commerce Cloud, Adobe (Magento), SAP Hybris, Aptos Digital Commerce, Big Commerce, and Shopify.
- 12. Over the last few years enhancements to customer support and integration has been a point of emphasis, and based upon customer discussions, significant progress has been made in this area.
- 13. We believe OMS is the foundation of a unified commerce (UC) technology offering. Based upon our review of the UC landscape, Aptos has one of the three most complete UC technology stacks servicing the specialty enterprise space. Their strong OMS product helps anchor this.
- 14. Given their recent acquisition of Revionics, we believe this will be a gateway for entry into the grocery space. While grocery OMS has added complexity beyond General Retail, we expect key elements of the Aptos offering to be expanded and enhanced to become an offering in the FDC space. In a speculative fashion, key candidates would be CRM, POS and OMS.
- 15. In the last year they've added Aptos ONE Store Fulfillment is a mobile-native application supporting in-store fulfillment, including buy online, pickup in store (BOPIS), ship from store, and store-to-store orders.



Cegid:

- 1. They are one of the leaders with regards to retail specific OMS installs with over 300 of them, and over 1,000 retail clients.
- 2. The majority of their retail installs, and (therefore their OMS installs) are in the mid-market specialty space.
- 3. They are a market leader in the European mid-market specialty space, especially in France.
- 4. Their technology stack (Yourcegid Retail) is a suite of solutions supporting a range of Unified Commerce capabilities.
- 5. The key limitation with their OMS product is that it is not available as a standalone product, but is sold as part of the suite, meaning you must be using their POS and other components of their technology stack. As they don't offer E-Commerce, they integrate with a wide variety of products including Adobe (Magento), Salesforce, Prestashop, Shopify, SAP and Others.
- 6. Core OMS capabilities such as BOPIS, BORIS, Endless Aisle and Click & Collect are supported though they support only about 15 of the customer journeys.
- 7. They (along with IBM) support the most diverse set of architectural delivery models.
- 8. They currently do not support any out of the box marketplace integrations.
- 9. Global key system integrators include CGI, Atos, Cap Gemini, and Viseo.
- 10. Of all the vendors we queried about their global OMS footprint, Cegid led with installations in 75 countries worldwide.
- 11. One of the quickest installation times.
- 12. Over the last 12 months they've added capability enhancing the functionality of click & collect, endless aisle, ship from store etc. with returns in-store etc.
- 13. Even though heavily leveraged in specialty apparel, have continued to add OMS clients at a clip beyond what current market conditions would suggest. They note around 40 OMS client additions in the past 12-18 months and their six month no cost, try before you buy point functionality is bound to create tremendous good will and client adoption as market conditions improve.
- 14. As they deal with many high-end fashion brands out of the box functionality includes appointment setting/stock reservation through the OMS solution.



enVista:

- 1. One of the early adopters and visionaries in microservices. They created their multi-tenant SaaS microservices platform in 2014. At the time there was SAP and a few others talking about the precursor of microservices in SOA (services oriented architecture).
- 2. They have added several large OMS clients over the past three years, with a strong uptick in new deals this past year including additional Tier I accounts.
- 3. They are showing some success when competing against the largest and most established OMS players.
- 4. Their complete solution stack is built from the ground up on microservices.
- 5. They have strong consulting expertise in the area of supply chain optimization, their roots, which underpins their rapid growth in commerce technologies. Their supply chain customers are in the areas of Retailers, Distributors, Manufacturers, and 3PLs as a further proof point to their supply chain history. They will often use SC consulting as a path into accounts that they have shown great success in growing. While consulting is still key to their business model they are beginning to emphasize software over services now.
- 6. They have several lower Tier I clients for both OMS and POS and have just begun offering E-Commerce software. They are quietly assembling many of the major pieces supporting a complete Unified Commerce technology stack.
- 7. For integration, their OMS has been integrated to POS from Aptos and Oracle/MICROS. In E-Commerce, they have existing integrations with Adobe (Magento), Salesforce, Oracle, Shopify, Woo Commerce, BigCommerce, and WebSphere Commerce.
- 8. They view their offerings of PIM, E-Commerce and Drop Ship Management as key points of differentiation.
- 9. While we did not ask, nor would we share pricing details, based upon potential client feedback, we understand their pricing to be very competitive, especially within the context of a solution that can scale to Tier I.
- 10. Their OMS solution can also support B2B clients. Saddle Creek white labels enVista's OMS solution with roughly 50 customers.
- 11. Their OMS currently integrates with Woo Commerce, Adobe (Magento), Shopify, Shopify +, ATG (Oracle) and Salesforce, and supports marketplaces of Amazon, Jet, Wayfair and eBay.
- 12. They are beginning to add elements of AI into the solution around sourcing and fulfillment.
- 13. Returns management is under development.



Fujitsu:

- 1. Fujitsu's Glovia solution is a relatively new entrant into the retail OMS space. It is based on their B2B product (offered since 2008) that is currently servicing over 300 clients.
- 2. Enterprise B2B commerce customers include Bayer, Canon, Royal Canin and Syngenta.
- 3. Many of those clients are large conglomerates with complex requirements.
- 4. Fujitsu currently has two retail OMS clients, one a mid sized apparel retailer (since 2012) and the other, a recent win, one of the twenty largest retailers in North America. They are a Specialty Hardgoods retailer shared under NDA.
- 5. Fujitsu has a strong partnership with Salesforce which hosts their OMS solution. This also allows them to tap into Salesforce's Service cloud.
- 6. Given it is a relatively new entrant key areas of focus over the next year will be expanding customer journeys to more fully support differences between B2B and B2C requirements.
- 7. They are able to support marketplaces with their open APIs. Customers have integrated GLOVIA OM with several marketplaces like Amazon, PetSmart, Chewy.com, etc.
- 8. One of the core selling points and key points of differentiation of the Glovia solution is the ability to support product customizations which is becoming more prevalent in today's retail environment. This was a key aspect of the recent win for the very large Tier I North American retailer.
- 9. A wide array of AI based 'accelerators' supporting OMS are on the near-term roadmap. This is supported via Salesforce's Einstein capability.
- 10. They embarked this year looking at 'accelerators' in retail as a way to deliver quick wins and rapid ROI. They have been able to extend and leverage this focus due to COVID.
- 11. Anyone with a significant investment in the Salesforce platform should include Fujitsu in their RFP process due to their deep integration/partnership with Salesforce.
- 12. Very impressive that they would extend 10 licensees at no-cost for six months to support retailers impacted by COVID.



IBM:

- 1. Early and leading marketplace provider with over 2x the market share of the nearest competitor; 2.3x in General Retail; dominant Tier I leadership. Their solution has been implemented down to Tier IV by Infosys who white labels their OMS product, albeit with some pre-defined configuration parameters.
- 2. They have 50+ clients in the IR500 list, and 10+ using their cloud-based OMS product, among 30+ total cloud customers.
- 3. While historically known for expensive and complex implementations, they have made significant improvements in their implementation times. History shows that implementation with them usually took over a year, now they report most implementations in the 4-5 month range (best was two months). This puts them in the middle of the pack (note that many of their efforts are with larger and generally more complex environments).
- 4. We believe that the growth of their cloud business has helped drive improvements with system integration along with a growing ecosystem of integration partners.
- 5. Their Fulfilment Optimizer (Watson Al powered) for orders supports both shipping cost and fulfilment sourcing. It is very powerful and can include labor cost and utilization in real time within a store to determine shipping rules. If not the most robust shipping optimization algorithm, one of the two or three best.
- 6. IBM continues to embed more Watson AI functionality into their OMS product. They shared some very intriguing scenarios with us in how (REI as one example) it is being utilized. IBM is a market leader around AI and really comes as no surprise that they have invested heavily into bringing AI into their product.
- 7. Supports both B2B and B2C sales. Market leader in both areas.
- 8. They offer a very broad array of POS integrations; when you include SI's all of the key POS players are supported.
- 9. OMS falls under the supply chain group, along with Blockchain, thus we expect further cross pollination between these two products in the future, and more importantly, continued investment in their market leading OMS product.
- 10. The IBM Call Center capability is embedded and part of the Order Management suite as an integrated add-on.
- 11. Of all of the packages we evaluated, they have one if not the leading distribution engine, supporting the most complex routing optimization algorithm and range of variables considered.
- 12. Their array and diversity of rapid implementation suites was one of the most extensive of any vendor we reviewed.
- 13. One of the most impressive updates was Decision Support System, part of their Fulfillment Optimizer, which has the ability to show the added benefit AI brings to the solution as a quantifiable calculation, supporting ROI justification real time. They refer to it as "Results Explainer and Continuous Benefit Reporting." We are far too often confronted with a vendor noting the use of AI in the solution, but rarely actual benefits. Showing this within the solution is brilliant.



Jagged Peak:

- 1. SaaS-only offering either single or multi-tenant along with microservices based architecture.
- 2. They offer feature updates about every three weeks.
- 3. The vast majority of their clients are in North America.
- 4. They currently support Amazon, Walmart, eBay, and Google Express marketplaces.
- 5. They support all of their own systems integration efforts and use no external resources.
- 6. Their primary focus is smaller up to mid-market specialty retailers.
- 7. They offer their own E-Commerce package as well, though it is more targeted toward lower end clients. For larger clients that needed additional capability they create websites on the Adobe (Magento) and Salesforce commerce platforms.
- 8. Since being acquired by Singapore Post (October 2015) can now provide an expanded outsourced fulfilment network in the US, Europe and Asia-Pacific.
- 9. WMS and TMS are fully integrated but not required to be purchased for OMS
- 10. Their EDGE platform is sold with these components either individually or as a bundled package OMS, TMS, WMS, Content Management (ECP)
- 11. Due to their fulfilment business, they offer a very broad array of shipping carriers integrated with supporting cross border commerce
- 12. Currently integrated with the following E-Commerce offerings: Salesforce Commerce Cloud, Adobe (Magento), Oracle, Elastic Path, Drupal, Shopify, Big Commerce, Kibo and CV3.
- 13. Unique OMS capability allows for customer product customization such as monogramming for Lenox china.
- 14. One of the quickest installation times.



Kibo Commerce:

- 1. They report over 400 active OMS clients spanning both retail and CPG, which is a significant increase over the 330 reported last year.
- 2. They offer 1 update per month. Major updates are every two months and minor, also every two months, on an offsetting schedule.
- 3. While also having Asia clients, most are in North America and western Europe, by a 9:1 ratio.
- 4. One of the key aspects of their offering that we really liked had to do with ongoing support. A customer success consultant is included with the license and part of their responsibility is to go through every quarter and look at the optimization of order routing rules to make sure they are using the most optimal rules and see if any should be added or augmented within their current framework.
- 5. They also offer their own mPOS and E-Commerce package, though both have much more modest installed bases than their OMS product.
- 6. Currently integrated with the following E-Commerce offerings: Kibo, Salesforce Commerce Cloud, Shopify Plus, Adobe (Magento), WordPress, Sitecore, SAP Hybris, and Oracle ATG.
- 7. Current POS integrations include: Kibo Mobile Point of Commerce, Aptos, Oracle/Micros, and Veras.
- 8. Their OMS supports call center functionality. They also provide client call centers outsourcing as a service, though not looking to add any additional clients.
- 9. Kibo uses both internal resources as well as partners such as PFSWeb, Gamma FX, Deplabs, Ignitiv, Elevate, and Cognizant for SI work. The partner ecosystem continues to be an area of focus.
- 10. With the Certona acquisition, it brings in additional partnerships including Deloitte, Astound, and Sapient.
- 11. For a mid-market targeted solution, they have a very flexible order routing engine and nice user interface to make creating those rules much easier for the business user.
- 12. Have added some really nice curbside pickup functionality that allows two-way communication via text or email. Added split pickup on BOPIS orders. Available-to-promise (ATP) now considers in-transit stock.
- 13. In the past year have added Looker (Google), a data visualization and BI platform which is embedded in the platform and all OMS clients benefit from Looker at no added cost.
- 14. Now can support over 100 shipping carriers.

Vendors (continued)



Manhattan Associates:

- 1. Fourth largest OMS revenue worldwide overall, but ranked and positioned as the number two provider overall with respect to solution strength (x-axis).
- Can provide market leading POS/mPOS through their Global Bay acquisition, but no E-Commerce offering. Following
 the Global Bay acquisition, the POS/mPOS solution has been totally rewritten to better integrate with their OMS and
 SCM offerings on a microservices platform referred to as Manhattan Active Omni which includes Loyalty, Clienteling,
 POS, Inventory and Fulfilment.
- 3. OMS, POS, Store Inventory and Store Fulfilment are a single application, thought can be procured independently and not dependent upon the other for deployment.
- 4. Microservices was introduced about two and a half years ago.
- 5. For hosting, they use Google only.
- 6. They provide full call center support and case management which is native to the suite. Service agents have full access to the entire history of all communications with the customer.
- 7. They support all major OS platforms: iOS, Android and Windows.
- 8. For cross border they have a partnership with Borderfree with pre-built integrations to allow for easy internationalization.
- 9. They are third behind IBM (97) and Oracle (32) with 28 known OMS accounts of retailers with more than \$1 billion in total revenue based upon IHL Group install information.
- 10. They are using ML, referred to as their Adaptive Network Fulfillment technology, to optimize the fulfilment process. Manhattan was an early adopter of AI/ML.
- 11. For systems integration some is done with internal resources as well as using large external partners such as Accenture/KSA, Deloitte, Cap Gemini, Sapient/Expicient and smaller providers such as Verint, Vira, and SCAPath.
- 12. Given their strong supply chain history and expertise they are a leader in the area of inventory management and visibility.
- 13. They can utilize different orchestration rules at the customer profile level, as well as consider priority, fulfillment method, delivery destination, etc. Orchestration at the customer profile level allows for next level personalization. Additionally they consider hard and soft dollar cost in their fulfilment logic. They have one of the most advanced fulfilment algorithms evaluated.
- 14. About 20% of their clients are using their OMS platform to process B2B orders and this is growing.



OneStock:

- 1. Written as a fully SaaS-based solution in microservices.
- 2. Primarily operating in Europe, with headquarters in France and an office in the UK.
- Over 40 logoed customers with most of those in the mid-market specialty apparel space. Their customers operate primarily in the sectors of fashion, footwear, cosmetics, interior decoration, gardening, toys, gourmet food, jewelry and watches.
- 4. They were founded in 2015, though they note the genesis of the solution was R&D efforts from 2008
- 5. They note their first clients in 2018, and thus have quickly gained traction in the OMS market landscape and a new addition to our report this year
- 6. Their key area of focus is reducing out-of-stocks
- 7. OneStock provides interfaces translated into more than ten languages, including English, French, Italian, German, Spanish, Polish and Dutch.
- 8. We have not received a briefing from OneStock.



OneView Commerce:

- 1. Written as a fully SaaS-based supporting single and multi-tenant deployments and extended to a microservices-based architecture back in 2012, making them an early adopter of this architecture.
- 2. Key E-Commerce integrations with Salesforce, SAP/Hybris, Oracle/ATG and IBM.
- 3. They offer both OMS and POS. Most clients have both.
- 4. OMS and POS includes an enterprise inventory management module that integrates to any legacy POS for omnichannel processing.
- 5. Continuing to build out functionality in support of the Kroger account. That win was announced in early 2019 and development continues.
- 6. Almost all installation are with >\$1 Billion specialty retailers, North American and Western European based.
- 7. Current OMS deployments in 8 countries.
- 8. As a company they have great momentum after recently winning the opportunity to provide POS software for Kroger, and also validating their microservices vision.
- 9. They do not currently support marketplaces, but this is a roadmap item. Similarly, no current use of Al/ML, but this to is on the product roadmap.
- 10. Current functionality does not support grocery, but additional functionality continues to be added.



Oracle:

- One of the most complete Unified Commerce solution stacks across multiple segments for retail and hospitality from Tier I through III. This has been driven by both organic growth and acquisition. Oracle Hospitality handles accounts of all sizes, and in retail, large accounts are supported by Oracle and smaller deals would be primarily addressed through NetSuite.
- 2. Within the context of OMS, they have two products, Order Management and Order Broker. Order Management can be viewed as order management and visibility and Order Broker as the shipment optimization engine. This allows them to sell to clients with an existing or home-grown OMS, yet still benefit from the shipping optimization piece. We suspect that over the next few years these products will be merged.
- 3. About two-thirds of all clients use both Order Management/Broker though one is not required with the other or any other Oracle solution to function independently.
- 4. Both are available either as on-premises or SaaS-based single-tenant solutions.
- 5. The majority of their OMS installs are in the specialty Tier I and II space.
- 6. Average implementation time for both components of the Order Management Suite is 6-9 months. Order Broker can be implemented in 3-4 months.
- 7. All is utilized in the weighted brokering calculations used to determine the best fulfillment location. They have also applied All to their routing engine.
- 8. Beyond internal resources for systems integration, Oracle also uses the services of BTM, Logic, OLR, and Skillnet.
- 9. About 50-60% of their Xstore (POS) clients are also using their OMS, but this is not a requirement.
- 10. By our calculations, they are the third largest vendor, WW, by OMS revenue.
- 11. They have streamlined and enhanced the user interface for the Contact Center, which saw the introduction of Order Entry, Order Inquiry, Order Maintenance, Returns & Exchanges, and Held Order Processing.
- 12. They now offer an integration with Narvar Track It module to allow for an expanded series of last mile tracking communications via email or SMS.
- 13. We at IHL Group are bullish on Dark Stores. We believe COVID will be an accelerant of a trend much more pervasive in Europe but starting to gain momentum in North America. They have introduced a Dark Store offering which we believe is a strategically sound decision.



OrderDynamics:

- 1. They were acquired by Tecsys in late 2018 which will provide capital for expanding product development, sales and marketing efforts. Tecsys has supply chain expertise which has a natural synergy with OMS, though that expertise is mostly focused around the medical industry and not retail. Through Tecsys, they now offer WMS.
- 2. Written from its inception as a fully SaaS-based multi-tenant solution, and offering six updates a year.
- 3. In the process of migrating their solution to a microservices-based architecture
- 4. Focused on mid-market retailers with 20-500 stores in the general retail space in North America and western Europe. Most of their existing client base is represented within this demographic.
- 5. No POS offering and solely focused on OMS, and support legacy E-Commerce clients. The acquisition by Tecsys will help them expand their Unified Commerce coverage.
- 6. For those looking for an AWS alternative, they offer Microsoft Azure only.
- 7. Order routing optimization can route based upon how busy a location is. This is fairly unique for Tier II/III OMS providers. Routing also includes enhancements like order consolidation and shipping rate brokering.
- 8. Recently they have rewritten their returns management module to be more robust and feature-rich.
- 9. Typical integration is around 90-120 days.
- 10. Call center capability.
- 11. Currently offer E-Commerce integrations with Salesforce, Big Commerce, Shopify Plus, Episerver, Adobe (Magento), IBM, Oracle, and Kibo Commerce.
- 12. For POS, current Flooid and Veras integrations exists.
- 13. They tout a simplified returns process that requires only 1 scan and 2 clicks to return an entire order.
- 14. They support a wide array of marketplaces including Amazon, eBay, Walmart, Kohl's, and any listed provider on Channel Advisor.
- 15. There are no current plans to provide any AI/ML capability within the solution.



Radial:

- 1. Radial Order Management (ROM) is a multi-tenant SaaS offering.
- 2. Dropship Manager solution is available as single tenant or multi-tenant with supplier management services.
- 3. Target clients are those doing in excess of \$20 million to a half billion in E-commerce revenue meaning they scale from mid-Tier III easily into Tier I.
- 4. ROM consists of four components (DOM, Inventory, Customer Service & Store Fulfilment). DOM and Inventory are core; Customer Service and Store Fulfilment are available as optional modules. Radial Payments & Fraud solution is required for ROM, but they are working to unbundle and offer integrations to other payment platforms.
- 5. They emphasize their broad returns capability (both in-store and self-service) as key differentiators.
- 6. Another core differentiator to their business is the offering of Fulfillment & Transportation plus Customer Care operations as a service. Their outsourced fulfilment business comprises a large portion of their revenue and they have deep experience provided this service. They currently run 21 fulfilment center, second only to Amazon in shipping direct to consumer orders.
- 7. By our estimation, they are the tenth largest OMS vendor by revenue, though the do support a very broad collection of pure-play Ecommerce retailers which supplements their OMS revenue beyond what we capture.
- 8. Minor release every two weeks and major release every quarter.
- 9. They utilize ML for fraud detection and extend the utilization unto forecasting, sourcing rules and logic. They were the only vendor that mentioned AI/ML within the context of fraud as a unique capability.
- 10. They offer store associate delivery as a fulfilment option with one client currently considering utilizing this functionality.
- 11. As part of their customer care service, responding to social media is a component of that service.
- 12. In terms of growth, last year they added over 20 new clients, though more of those were in Tier II than I, which is not surprising given the market saturation in Tier I and that those accounts, due to their complexity, don't turn over as often.
- 13. They support an extensive array of marketplaces which include: Amazon, eBay, Jet, Walmart, Newegg, Sears, Wish, Price falls, Google, and Rakuten.
- 14. Current E-Commerce integrations include Salesforce, Adobe, Shopify Plus, Kibo, SAP and IBM.
- 15. A very impressive list of features and functions have been added over the last 12 months espeiclaly some enhancements to the order brokering logic.
- 16. Full returns management capability is on the roadmap.



Salesforce:

- 1. Available as a multi-tenant SaaS based solution.
- 2. They are one of the leading SaaS software providers in retail, and in IT in general with over \$10B in SaaS revenue.
- 3. In the specialty retail space they also provide market leading E-Commerce software that is integrated with their OMS software. Salesforce OMS requires the use of their E-Commerce software.
- 4. They provide between 8 and 10 product releases annually.
- 5. Salesforce cut their teeth on CRM within retail, where they are a market leader, and bring this expertise into the retail product portfolio.
- 6. Through their Salesforce Service Cloud they have one of the most feature-rich capabilities in the area of call center support with embedded AI functionality that can support customer queries. While the exact number was shared under NDA, they have cases where a very large percentage of customer inquires were able to be addressed with AI, and those inquiries achieved higher customer satisfaction scores compared to human interactions.
- 7. They have a very large developer community, which can help extend their solutions.
- 8. While one of the concerns over cloud is the homogenous nature of solutions among all clients, through their architecture they can accommodate some level of customization. This is a unique capability. They note their common development standards help reduce customization costs.
- 9. Broad returns management capabilities.
- 10. They support marketplaces through their Channel Advisor partnership.
- 11. Beyond Salesforce employees, SI efforts are supported through the following partners: OSF, Visionet, Sapient, and LiveArea.
- 12. One of the quickest installation times.
- 13. Due to the power of the Salesforce platform they offer one of the broadest levels of country and currency support. Broad country support is a differentiator. There is out of the box support of 35 languages, including right-to-left languages like Arabic and Hebrew.
- 14. They fully rewrote their OMS solution in 2019, and the new release (early 2020) has achieved rapid adoption.
- 15. When they architected the solution there was a focus around customer journeys. The ones they focused on were of prime emphasis during COVID thus they were well positioned for the current pandemic while also offering one of, if not the broadest array of quick-start offerings of all vendors responding to our survey.



SAP:

- 1. The market share leader in B2B E-Commerce.
- 2. Use of their OMS requires use of either their E-Commerce (Hybris) or ERP system. Within vertically integrated companies and very large enterprises this isn't an issue because there is a good chance the company is already using SAP ERP, but where this is not the case, can be a limitation because it may force a potential client to purchase redundant technology or replace a technology that they are happy with.
- 3. Their European market share in OMS is much larger than in North America party due to the bundled requirement noted above. This is a byproduct of their European leadership in ERP and E-Commerce in retail which is not nearly as dominant in North America. For example for every North American Hybris retail customer, our records show they have seven European ones.
- 4. They offer their own POS through the legacy Triversity product (which is de-empahsized) and their closer-than-a-partner-partnership with GK Software. They no longer sell the Triversity product, but do maintain it for existing clients. Those on this solution continue to shrink on a yearly basis. GK is their go-forward POS offering, and for the intent of integration purposes, should be viewed as an SAP offering. GK, for their part, has been "tearing it up" in the POS space. Not only are they the fourth largest in terms of WW POS revenue, but they are having great success in North America over the past couple of years and displacing traditional North American players, especially in the grocery space.
- 5. SAP Order Management is part of the Hybris Commerce Suite.
- 6. SAP OMS clients span the specialty and grocery space and tend to be predominately Tier I (Over \$1B in revenue) suggesting they can support large and complex environments.
- 7. Based upon product literature the solution can be consumed either on premise or in the cloud as a microservices based solution.



Symphony RetailAl:

- 1. OMS is bundled with Order Fulfillment, Click & Collect, and WMS; but can be purchased separately.
- 2. They started selling OMS in 2006, so over a decade of experience in this solution space.
- 3. They have a dominant position in European grocery OMS, which is ahead of the North American grocery market. They are rapidly increasing their North American OMS presence in the retail vertical which comprise of fast-moving consumer goods.
- 4. They provide on-premises and single-tenant SaaS, as well as microservices.
- 5. Beyond grocery, Symphony RetailAl also has OMS clients in the Department Store, Drug, Mass and Specialty space.
- 6. Over 25 of their OMS clients have over \$1 billion in revenue, and support over 10k SKU's.
- 7. By our estimation they are the second largest OMS vendor by revenue. They are well positioned in the growing Grocery OMS market.
- 8. Their expertise in Fresh Item Management is a differentiator for them, as this plays a key role in OMS for grocery.
- 9. They too have a strong B2B business.
- 10. They provide cloud hosting on any provider, though Microsoft Azure is the default.
- 11. Out-of-the-box E-Commerce integrations for both SAP and Adobe (Magento).
- 12. Their key integration partners are CapGemini and Infosys.
- 13. Due to their extensive OMS experience with Grocery in Europe they can support Dark Stores.
- 14. For in-store picking, their software supports picking path calculations.
- 15. Over the past year they have made some upgrades to their architecture which now allow them to process between 60 and 150 order lines per second. At the high end of this range would mean around half a million order lines per hour.

Methodology

Here we describe how we arrived at he figures included herein.





How We Got Here



The IHL Insight Market View series is part of the IHL Retail Executive Advisory Program. This is the first of several research studies to be released and it is only available as part of an advisory relationship. The IHL Insight Market View research studies combine several of IHL's best-in-class research components into a single industry view meant for retailer and vendor executives.

Step 1 – We leverage our <u>WorldView IT Sizing Forecast Model</u>, a sizing and forecast tool for over 300 retail Hardware, Software, SaaS and Services categories. IHL has been sizing and forecasting the retail/hospitality market worldwide by solutions for over 10 years. This provides the upper bounds of the market data and total market size.

Step 2 – We combine this with our <u>Sophia Data Service</u> that tracks over 4,500 enterprise retailers and hospitality providers (with a minimum of 50 locations) in terms of which vendor's technology a given retailer/hospitality provider has installed, the total lanes/licenses, the timing of those installations and when they are due to be replaced.

Step 3 – We validate the installs and business sizing for each vendor through public records and vendor/channel interviews. Customer service/traction is validated through existing customer interviews and surveys.

Step 4 – We merge all of this together into a singular view that not only provides total market size, but also market share and scale of difference between vendors.

This study represents the overall worldwide retail and hospitality Software and Software-as-a-Service market. For more information on the additional studies being released as part of the *Retail Executive Advisory Program*, please see our website or contact us at +1.615.591.2955.

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