



# The Future of Order Management Solutions (OMS)

The freedom of choice and flexibility

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# The Future of OMS

## The Freedom of choice and flexibility

The intention of this white paper is to provide answers to the questions that your organisation may be asking about “how to improve our order management capabilities?”

We will look at the options for retailers and other organisations, for implementing solutions for the first time, or, more commonly improving and replacing their existing systems.

### Key takeaways:

- ▶ An Order Management System is the essential agile orchestration layer between all sales channels and channels of supply. It is configurable and adaptable to fast changing business and customer requirements.
- ▶ An Order Management System has a broad set of capabilities to support business to customer and business to business ordering, through the order lifecycle from offering, promising through ordering and fulfilment.
- ▶ ERPs are great for managing operations within the 4 walls of an organisation and when processes are reasonably fixed and not changing.
- ▶ An Order Management System enables attainment of sustainability goals. An OMS can optimise sourcing and maximising inventory utilisation, minimizing waste and markdowns, lost sales, and use of resources.

The background to the requirement to invest in the supply chain and order fulfilment in particular, is varied but common drivers include:

- ▶ The increasing pressure to deliver a superior customer experience, not just immediacy but also better promising as well as transparency to align with sustainability and green initiatives.
- ▶ The need for a real-time view of inventory to pinpoint where stock is at any point in time throughout the whole supply chain – without this, organisations will struggle to deliver on their promises to customers and make their supply chain as efficient as possible.
- ▶ And the fact that many organisations’ current order management solutions have been cobbled together and now require modernisation to provide the required agility and resilience.

The following questions are typical of those being asked by organisations we’ve been working with recently. We put these questions to a panel of experts from IBM and Retail Reply and have shared their responses to provide you with a wider perspective based on insights gathered from recent engagements.

# 1.

## What are seen as the major business drivers behind organisations' decisions to invest in an OMS?

The business organisations that we have been working with, are familiar high street retailers, with bricks and mortar shops that have been offering customers on-line ordering, home delivery and click and collect options for many years, to digital only retailers.

For very good reasons in their early days they either built their own systems, developed solutions around off the shelf applications, or implemented best in class leading Order Management Systems.

Over the years requirements have changed, offers and processes have become more complex, and the systems they have today reflect that.

Also technology, from platforms and integration protocols to development languages, has changed significantly.

The increasing use of Cloud platforms gives new hosting options, allowing businesses to optimise infrastructure and software platforms, which technical resources they need, and how to finance the operation of their information technology.

Retailers are also now finding that their applications that have delivered significant business benefit over the years, are now holding back their ambitions and impacting the customer offerings they are able to implement.

Changes in technology such as the emergence of cloud and migration to web native applications, from bespoke applications, thick client interfaces, etc., often mean that finding technical resources with the skills and experience of the older technologies is a problem.

Changing Heritage systems is becoming harder, slower and more expensive, with greater risks that are harder to manage.

Therefore, a key business driver is to remove the blockages – by replacing these Heritage systems and processes with flexible applications that will deliver the ability to develop new customer offerings while also bringing efficiencies to existing offerings as part of a systems and process transformation.



## 2.

### What sort of organisations are implementing OMS capabilities?

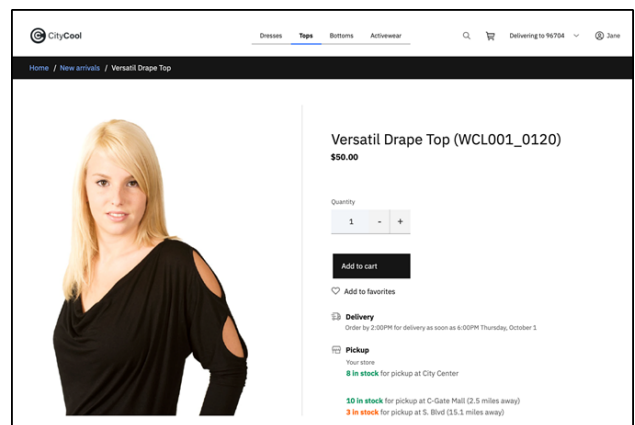
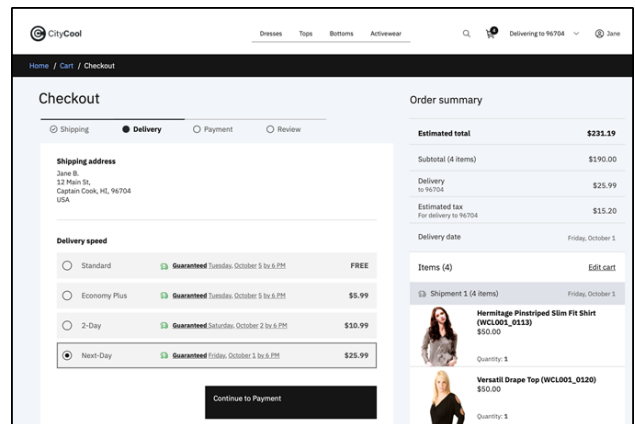
For many years Retail is the dominant industry segment driving adoption of an OMS and consequently the innovations engineered by software vendors. This is still a very important sector for OMS implementations and Retail remain at the forefront of demanding and adopting new capabilities. More on this later.

In addition to Retail, other industries are seeing the need to launch or upgrade their digital front office and adopt omni channel best practices. This includes traditional Consumer Packaged Goods manufacturers who now see the benefit of going Direct to Consumer via web shops. Distributors and Wholesalers also offer new digital shopping channels and now require OMS capabilities to enable their omni-channel fulfilment operations. Other sectors are B2B wholesale and distribution, industrial, automotive, telco, and third-party logistics companies.

Regarding new innovations, retailers are now pushing next generation OMS capabilities such as Real time inventory, Intelligent Promising before the buy button, fulfilment with AI to optimise inventory and delivery resources. New UIs are available to enable business users to control availability, sourcing logic and fulfilment processes more easily and in an agile no-code way.

All these lead to superior shopper experiences, better conversion rates, reduced cancellations and deeper levels of inventory and resource optimisation, in turn benefitting companies with higher revenue and lower costs.

For more information about these innovative capabilities, refer to: [IBM Sterling Intelligent Promising](#).



### 3.

## Once an organisation has decided to implement a new or improved OMS solution, what are the key factors they should consider when selecting the most appropriate OMS solution?

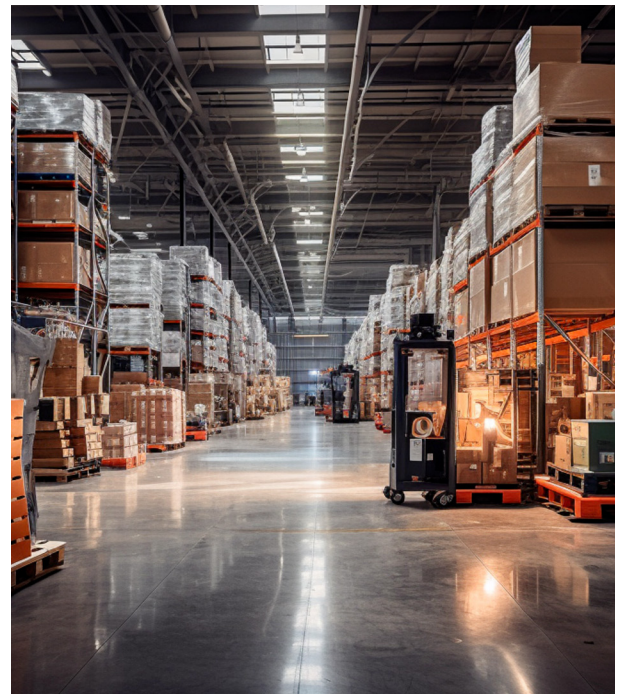
Firstly, however mature an organisation is, their future is most likely to include new opportunities, new ways to market and new and revised processes, therefore the order management solution needs to be configurable to complement changing business operations and processes.

These processes are likely to add more process steps to already complex operations, therefore being able to configure and integrate new processes within the systems through business process model configuration, using proven preconfigured processes, enables an organisation to move fast and seize opportunities. New processes can often involve onboarding new trading partners, such as drop ship vendors or new carrier services. The ability to onboard and integrate fast in a reliable and secure way is vital for business agility.

Secondly, as we are all experiencing, the world we live in is ever more volatile. From a customer perspective, there are new ways to engage with retailers, and more retailers to choose from – therefore retailers must differentiate themselves to gain and retain customers. Their operations and systems must deliver that differentiation, such as offering more personalised, intelligent and reliable promising before the cart checkout, and then be able to keep the promise.

Thirdly, volatility impacts both demand and supply. The normal fluctuations in retail demand throughout the year, such as seasonal, holiday and celebration events, critical volume events such as significant global product launches. Therefore, an order management solution needs to scale rapidly to handle all the order volume and complexity thrown at it. And it needs to scale down and minimise operating costs when demand is less.

On the supply side, even with the best forecasting and supply chain tools, the inventory we have may not be in the optimal location, it may still be upstream with the retailer's suppliers. Therefore, an order management system that can exploit all available inventory, wherever it is, will help drive sales, minimise markdowns and optimise costs.



# 4.

## How can an OMS help to facilitate new operating models such as new channels or new fulfilment routes?

An Order Management System is an enabler of an efficient and scalable operating model for any business that deals with customer orders.

The multiple capabilities of an OMS support the business domains to optimise processes and the use of resources, it brings together information and events from the customers, retail store operations, customer care agents, distribution and logistics, through finance and accounts, etc.

We consider the OMS as the brain of retail operations for various reasons:

1. Seamless integration with any selling channel (including electronic, mobile and virtual commerce, Social Media platforms, marketplaces, offering subscription models, AR/VR capabilities, Pop-up stores, physical bricks and mortar stores, etc.). An organisation might have one or more sales channels in their current operating model, but that doesn't mean that they won't expand in future. So, flexible OMS capabilities and scalability are a significant benefit, removing constraints to building new sales channels.

2. An efficient OMS operates based on configurable business rules and workflows, rather than requiring technical development to deliver the functionality. This enables businesses to orchestrate order management irrespective of channel.

3. An OMS has the capability to integrate with enterprise applications such as inventory management systems to have a real time stock visibility across all locations. This eliminates (or reduces) the need for ring fencing stock. As mentioned earlier, OMS operates based on rules and workflows, so it can work out an optimal order fulfilment plan.

4. Talking about fulfilment plans, a business might have various fulfilment models (in-house, 3PL managed, hybrid, store, click & collect, dropship, vendor managed inventory, Fulfil By Amazon, cross docking, etc.). OMS can orchestrate the order through the various fulfilment nodes based on defined rules and stock availability, to ensure the customer receives their order as promised, while optimising the fulfilment for the enterprise.

5. In case of dropship or Vendor Managed Inventory, OMS has capability to integrate with external suppliers to manage orders for/from them.

These are just a few functionalities of OMS that enables any business to be flexible & scalable with their sales & fulfilment channels. We don't expect an established business to have all possible sales and fulfilment channels but an efficient OMS will allow any business to scale based on their strategy and goals to deliver a better customer experience.



# 5.

## What capabilities does IBM Sterling OMS offer?

Looking at a specific OMS, IBM's Sterling Order Management is a multi-enterprise, multi-tenant, global, scalable order fulfillment platform. It is a comprehensive software solution that tracks orders from inception to delivery, and manages processes and data connected to the order as it moves through its order life cycle. It supports cross-channel orders through the configuration of new order entry types and provides cross-channel order orchestration capabilities by intelligent brokering of orders across many disparate systems.

The IBM Sterling OMS manages all information, including order capture, inventory management, order fulfilment, after-sales services and scheduling. It provides real-time visibility into orders from all channels, and enables business users to dynamically make changes to order processes. Business users would have a single view of orders and inventory across the entire fulfilment network. Organisations/customers can order and receive from any channel, get a committed fulfilment promise, and track the order status. Sterling OMS allows complex order orchestration and provides ease of deployment with both on-premises, as well as containerised deployment on RedHat OpenShift or Kubernetes cluster. There is also a SaaS offering.

When planning shipments, the business can devise strategies to consolidate items into a single shipment and the routing of shipments can be optimised based on delivery costs and time. Sterling OMS uses a routing guide to specify the carrier/mode of shipment to be used. Sterling OMS also facilitates creating, modifying, and deleting these routing guides.





# 6.

## As most organisations will have an ERP solution, why are they implementing an OMS as well?

While it is certainly possible to use an ERP to manage orders and may enable an organisation to initially manage direct customer orders, for that organisation to be able to expand their customer offerings and meet and exceed customer expectations, they are going to need an OMS.

Just because an ERP can manage orders of multiple types – including purchase orders, sales orders, etc. it doesn't mean it is the right application for managing customer orders.

This is because managing customer orders is just one of the capabilities required of an OMS. An OMS also has roles throughout the lifecycle of ordering, from offering, promising and fulfilling, which includes a global view of all inventory.

Supporting the offer, the OMS will enable the management of products and services available to each channel

Promising, the OMS enables the retailer to make fulfillable promises to the customer. Customers that have poor fulfilment experiences with retailers don't give them many second chances. Poor fulfilment is a quick way for retailers to lose customers, through poor customer reviews and reputational impact, customers choose to shop with other retailers.

A good OMS will also provide capabilities that enable the retailer to offer promises that are effective at meeting business goals. A key goal is to be profitable and sustainable, so making offers that maximise return and minimise costs are essential.

Part of that capability is to maximise the return on inventory. With digital commerce, customer returns are much more frequent than with in-shop customers, therefore being able to resell returned products with minimised cost, handling and reverse logistics is a critical capability.

Moving on to Fulfilment, with multiple channels and customer offers and fulfilment routes, fulfilment can become complex. To meet the promises made before checkout, fulfilment orchestration capabilities become ever more important. We touched on order management, this includes management of returns.

Being able to manage returns efficiently and economically is one of the capabilities supported by a good OMS. Being able to use items returned to locations that are not catalogued for them means the cost of a return to warehouse or store transfer is avoided, or the cost of reduction to clear.

Additionally, there are low value items where the handling costs of a return will exceed the residual value, for these items economic disposition is essential.

So to summarise, it is about using the right tools for the job, with the right capabilities for both now and in the future. ERPs are great for managing operations within the 4 walls of an organisation and when processes are reasonably fixed and not changing. A mature OMS is designed to integrate - using multiple industry standard techniques, and easily work with multiple trading partners and internal and external systems.



# 7.

Supply chain sustainability is high on many organisations agendas.

## How can an OMS help?

First let's define what we mean by sustainability in this context, so that we can understand how OMS will contribute to the sustainable initiatives.

Sustainability may be defined as 3 types:

- 1. Environmental** – protection of natural resources and climate, prevention of pollution and hazardous waste
- 2. Economic** – the operational health of an enterprise, both current and future
- 3. Social** – respecting human rights, standards of living & working, etc.

An OMS is a key enabler for sustainable operations, making best use of inventory and minimising resource usage.

Through an OMS the enterprise has a holistic picture of Inventory Visibility and demand through the various selling channels. This enables efficient forecasting and supplier ordering, minimised inventory holding and faster stock turnover. This in turn reduces the need for physical storage, optimising energy and use of resources in the supply chain. Customer satisfaction and experience is improved with less out of stock exceptions.

### ► Fulfilment route:

An OMS will create an optimal fulfilment plan to deliver the customer orders by leveraging real time stock visibility. This reduces transportation costs through reduction in fuel & maintenance costs, with benefits to environmental and financial sustainability.

### ► Paperless Operations:

The majority of fulfilment processes & documentation can be automated and made digital, reducing the need for physical documents and labels, for example: printed invoices, packing slips, shipping labels, return authorisation, etc. This removes costs and benefits the environment through reduced paper production, waste recycling and disposal, as well as printer hardware and consumables, and the supply chain resources used for these not-for-resale products.

### ► Returns management:

An OMS optimises the processing of customer returns, reducing handling and inventory dwell time, making saleable returns available to the sales channels while efficiently managing disposal of unsaleable items. This reduces wastage and increases customer satisfaction, addressing social, financial and environmental sustainability objectives.

These are just a few of the use cases enabled by an OMS, that integrated into your business systems would provide many more valuable insights to deliver other sustainability initiatives.



# 8.

## What level of support is typically built into an OMS for integrating with customer care/support systems and processes?

Leading OMS solutions have User Interfaces designed for multiple persona types, such as Fulfilment & Supply Managers, Demand Managers, Store Associates, Store Managers and Call Centre agents.

The IBM videos on this [link](#) help describe the use cases supported, and best of breed solutions for customer care such as Order Capture, Order Modification, Order Cancel, Managing Order Holds, Appeasements, Returns.

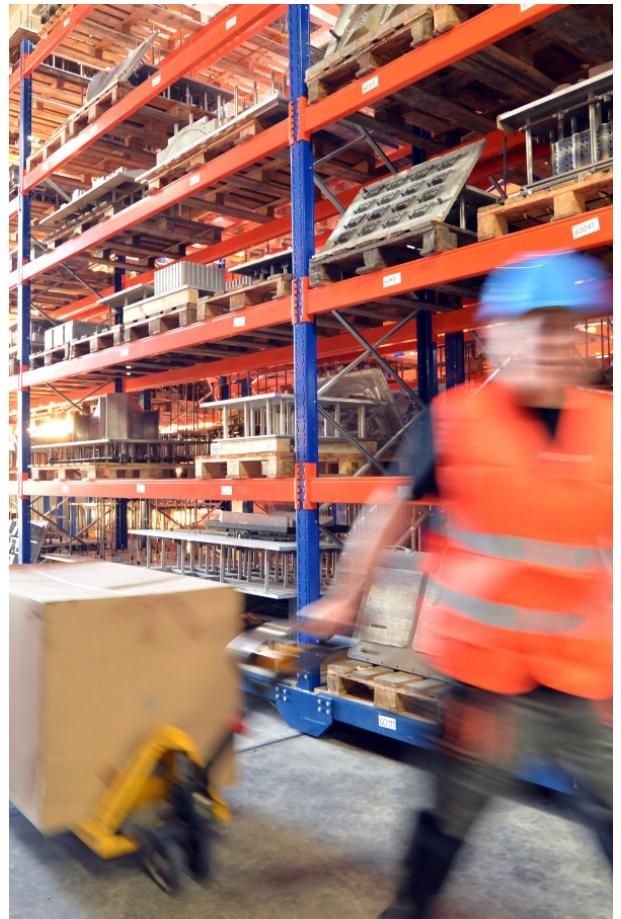
What will be required by each organisation is likely to vary.

In an optimal state we would be looking to minimise the number of systems used by a customer service representative.

Ideally the majority of calls should be resolvable through the use of one system, that hides the possible complexity and multitudes of systems and processes that enable order management and fulfilment.

Use of APIs to facilitate the exposure of authorised data to the representative, and execute actions to resolve issues.

Whether implementing a new system from scratch, or replacing an existing order management system, our advice would be to iterate, use the native OMS customer service functionality initially, and phase the integration with your customer relationship management application as OMS experience is gained.



# 9

## With many organisations moving to SaaS solutions, what are some of the key considerations compared to other hosting options?

When it comes to hosting, there are 3 main models that are being followed by many businesses:

1. On-Prem
2. Cloud
3. SaaS

Each model has its own advantages and disadvantages. A robust OMS application should be deployable in any hosting model, however there are a few key considerations that will help businesses to choose their optimal solution:

- ▶ Deployable packages e.g. executable or container model
- ▶ Support model for each of the hosting solutions
- ▶ Ability to adapt to change in SOP's
- ▶ Anticipated future growth & scalability
- ▶ Security
- ▶ Cost of ownership and maintenance
- ▶ Data retention
- ▶ Alerting & Monitoring
- ▶ Reporting (Out of the Box & Custom)
- ▶ Application/technology landscape integration i.e how well it can be integrated with organisation's technology stack

The IBM Sterling OMS provides a SaaS version, which is designed for organisations that are looking for foundational order management capabilities to augment their existing e-commerce initiative or to start a new omnichannel initiative.

The IBM Sterling OMS also provides other hosting options – on-premise deployment, IaaS – mode of deployment of a cloud platform, container-based deployment on a OpenShift/ Kubernetes cluster. Sterling OMS comes with a large network of implementation partners with deep expertise implementing & supporting OMS On-Premise and Cloud. IBM is proven to scale with a robust set of customers across various domains, who have implemented OMS via these various deployment options.



# 10.

## What historical data do you typically see organisations store in an OMS? Are there are practical guidelines you can recommend?

The OMS is really there to support the operational management of customer orders, so only current orders should be kept in the core OMS.

Completed orders should be archived regularly, otherwise it is very likely that the performance of the application will degrade – how often on a call to a call centre do you hear “sorry the system is being very slow today”, we don’t want our service representatives to be saying this to customers.

So what do we mean by current orders? These are the placed orders, orders being processed, and orders that have recently completed – so maybe within the last month.

One of the challenges from the business teams is that customer warranty claims can be made for much longer periods. It is common to have 3 or 5 year warranties on electrical goods, so the customer facing services need to be able to look back to those orders.

But does that mean keeping 3 to 5 years of orders in the live OMS?

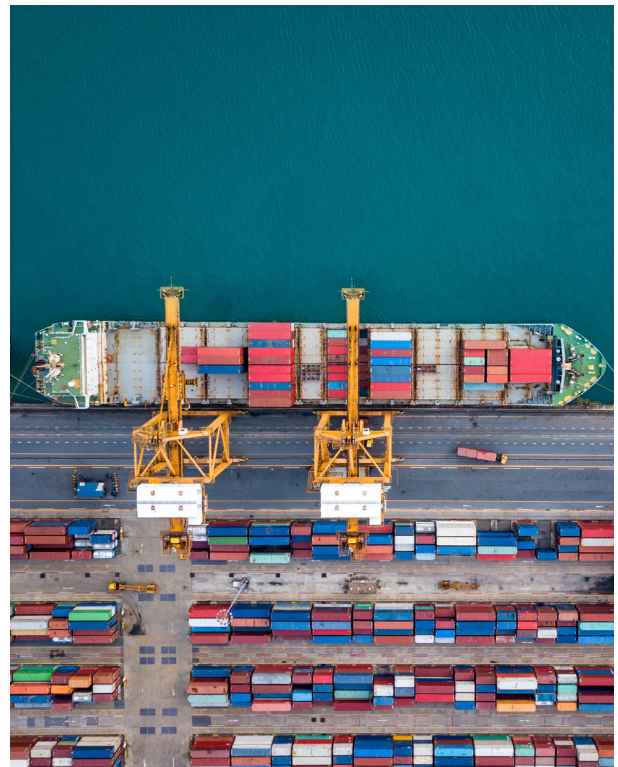
We strongly recommend that you don’t.

The processing on orders that are from more than a month ago is most likely to be in the low single digit percentages, and if not, then the OMS is unlikely to be the root of the problem.

But that doesn’t mean that the order data should be lost or placed in an archive that is difficult to access. It means that either your OMS needs to have an archive solution within the suite, or an API and services that enable lookup and retrieval of

historic orders from a data warehouse, or similar. And a means of associating the latest order management activities to the historic orders.

So to summarise, keep your OMS order history lean. And address the retention concern upfront, don’t wait until you have a large data problem to remediate.



## Why IBM OMS?

Accelerate transformation by simplifying technology integrations and implementation complexity to deliver best in class omnichannel order fulfilment processes. These include real-time inventory management and visibility for better promising, curbside pickup, buy online pickup in store (BOPIS), and ship from store (SFS). IBM Sterling Order Management contains an inventory management software platform that provides an intuitive interface with easy-to-use functionality and notifications.

Streamline your ecommerce management and fulfilment centre with the IBM Sterling Order Management order fulfilment software solution. Merge all your sales channels onto one fulfilment platform that helps you accurately track inventory levels, coordinate third-party logistics, organize customer orders, shipping options and returns management, all while reducing shipping costs. Cloud-based tools and apps make your ecommerce platform and inventory management system smarter, transforming your large or small business for a better customer experience.

## Why Retail Reply?

Retail Reply helps brands accelerate their response to the opportunities of digital transformation and customer experience, both in-store and online, in the retail, fashion, telco and hospitality sectors. Retail Reply support clients' digital transformation across Digital Strategy, Planning, and Delivery. Our expertise includes IT architecture, digital product delivery, customer centre transformation, point-of-sale implementation, loyalty & promotion-engine development and execution, online and mobile customer experience, omnichannel implementation via microservices architecture, and capability-led planning.

[Learn more about IBM OMS →](#)

[Learn more about REPLY →](#)



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