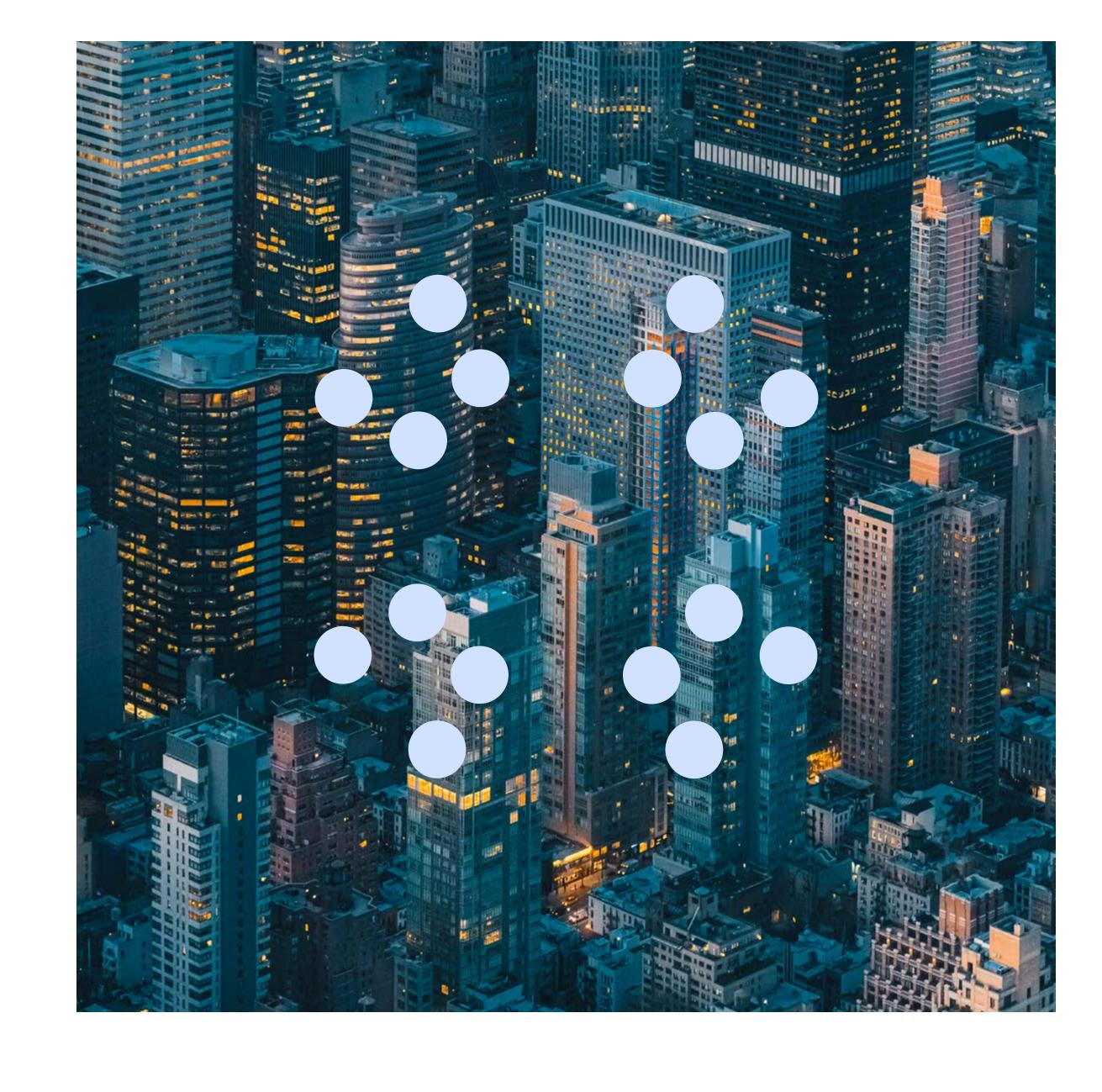
IBM Sterling OMS:

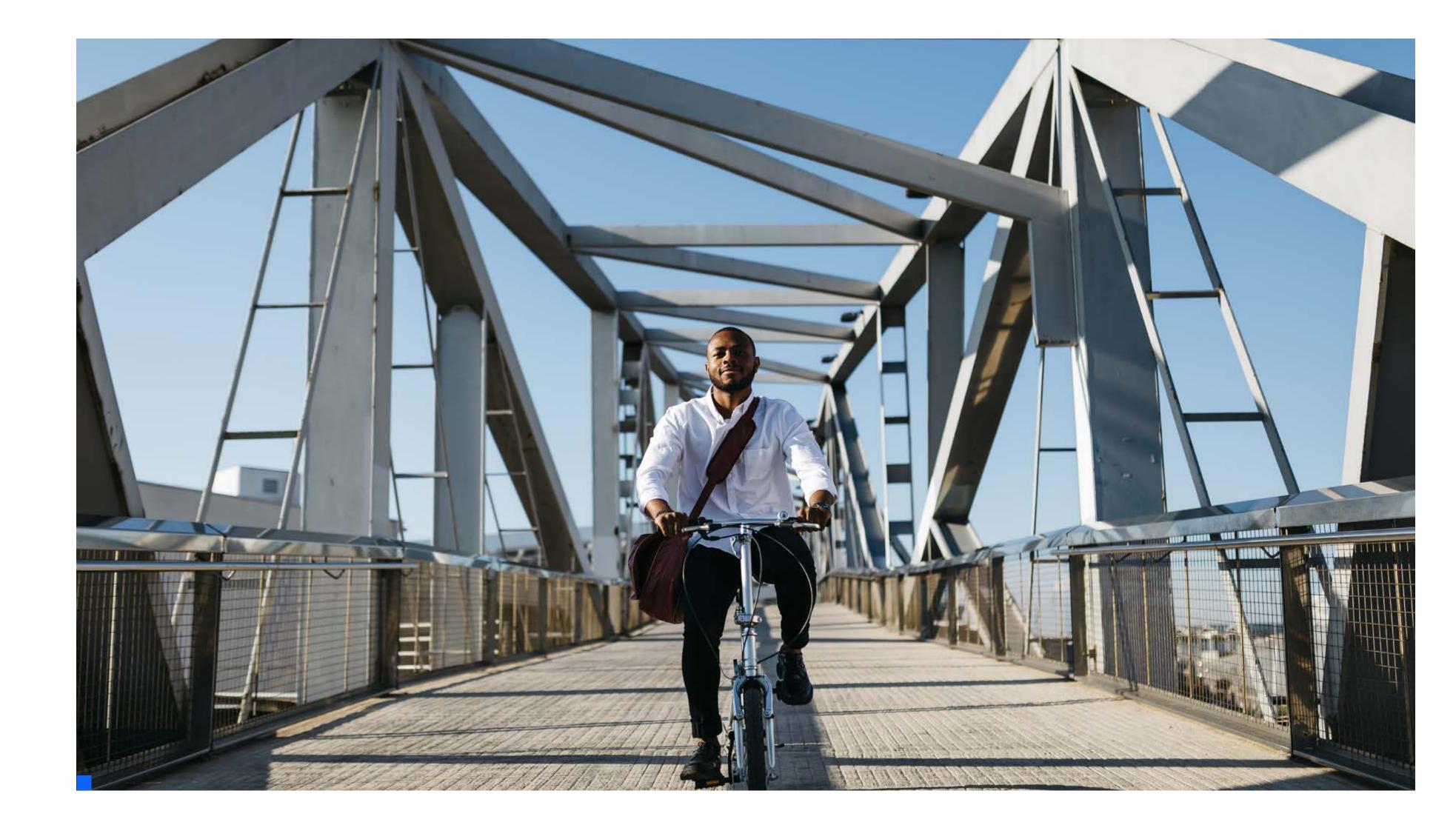
The future of order management



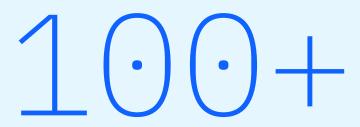


Businesses need flexible order management solutions (OMS) that foster *freedom of technology choice*. Learn how IBM Sterling OMS helps you drive customer satisfaction, increase fulfillment profitability and support new digital and in-

person customer experiences.



IBM Sterling
Order Management
is the #1 order management
platform for smart, scalable,
seamless commerce



largest retail clients with over \$1 billion in annual revenue are served by IBM.¹

2x

the number of stores served by IBM's solution compared to any other solution.¹

#1

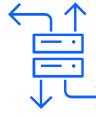
leader in the G2 Winter 2023 Grid Report for order management software in 6 out of 6 categories.² IBM Sterling OMS is a best-of-breed product incorporating...



State of the art User Experience design...



Trustworthy AI...



Flexible architecture...



and Sustainability principles.

Let's explore how....

	_		L	_		L _
- ()	\bigcap	n.	Т	\Box	n:	ts
			Ľ		11	LJ

 $01 \rightarrow$

Introduction

04 →

Transparent, Trustworthy, Transformative AI

02 →

Reimagined User Experience

05 →

Customer-focused Sustainability 03 →

Flexible Architecture

06 →

Conclusion

Introduction

In today's fast-paced business environment, freedom of choice is key when it comes to creating the unique supply chain that fits your business and delivering superior customer experiences.



Meeting evolving customer expectations requires flexibility

As online shopping becomes ubiquitous, customers seek elevated shopping experiences that enable freedom of choice and flexibility. This means providing customer experiences like fulfillment options, accurate order delivery promises, flexible return policies, and superior instore customer service.

In order to provide these superior shopping experiences and capture customer loyalty, retailers must have real-time visibility into their inventory and supply chains. Meeting customer expectations is key to long term growth and profitability for retailers.

IBM Sterling OMS offers technology freedom of choice

An Order Management System (OMS) that offers flexibility, agility, and the ability to evolve and expand is crucial to meeting customer expectations.

IBM Sterling Order Management is a cutting-edge solution that streamlines operations, enhances customer satisfaction, and maximizes profitability - making it the ideal choice for any business looking for a reliable, scalable, and flexible OMS solution. It helps businesses pivot quickly to fulfill customer needs, while maintaining a solid data foundation and transparency to support long-term sustainable supply chain strategies.

Cater to the New Shopper

We understand, and deliver, what the nextgeneration shopper expects from modern commerce experiences. Ultimately, it comes down to meeting consumer need for more certainty, choice and transparency in the shopping journey.

Consumers are likely to go elsewhere if a retailer does not offer the services they desire like curbside pickup or return flexibility.

In fact, nearly half of consumers say they are likely or very likely to shop elsewhere if a retailer does not provide visibility into when they can receive the product they want, or an acceptable substitution, before they hit the buy button.³

With IBM Sterling at the forefront of innovation in order management, clients can be confident in their ability to stay ahead of the curve.

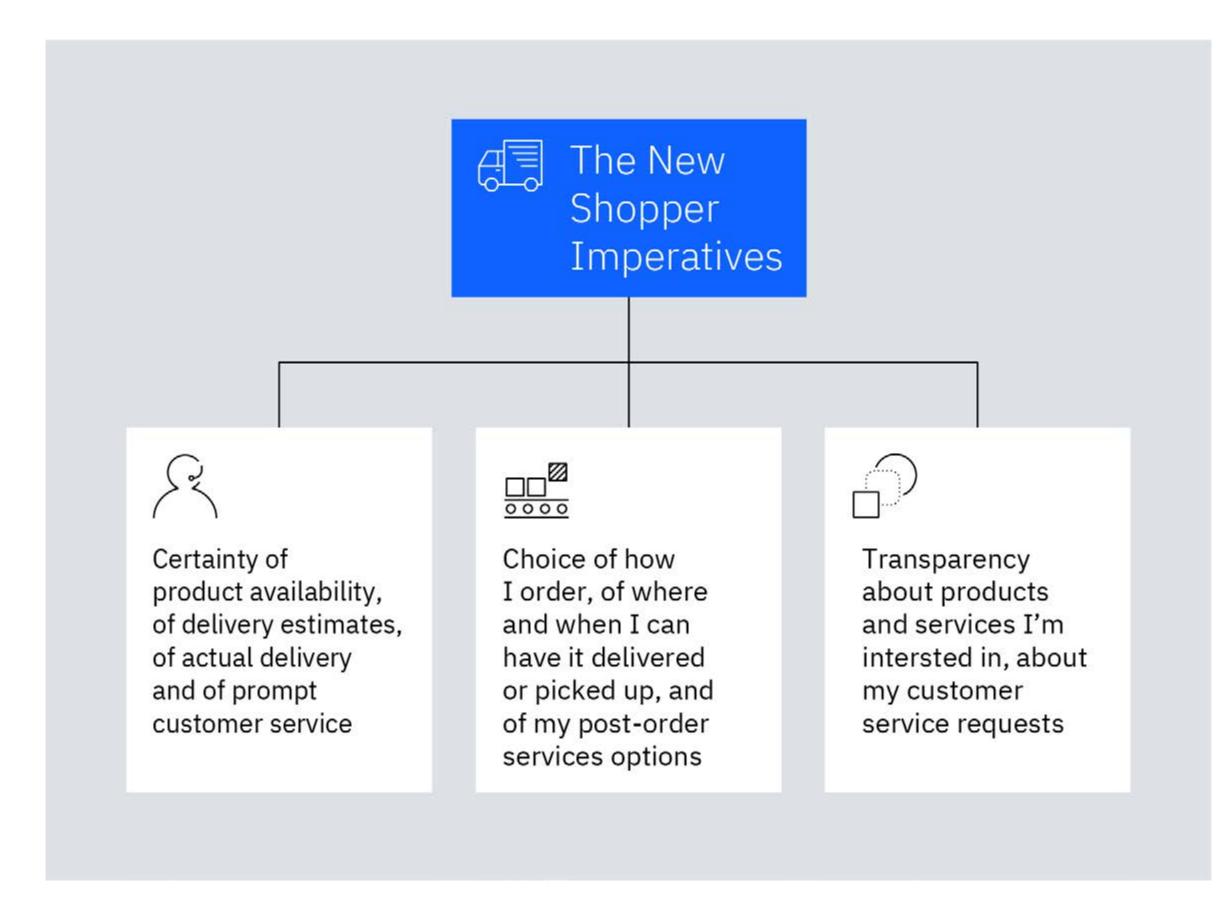


Figure 1. Next-gen shoppers expect more from ecommerce experiences.



45.5% of consumers say that they are likely to go elsewhere if a retailer does not offer curbside pickup³



50.9% say the same about the ability to return purchases made in-store or online to either channel³

45.5%

Reimagined User Experience

IBM Sterling Order Management's intuitive user interface is designed to support users and enable their freedom and flexibility to work the way they want.



A reinvented user experience based on award-winning design

Built using IBM Enterprise Design Thinking and the award-winning Carbon Design System, the user interfaces are intuitive and approachable for business users by allowing for low code/no code models.

Carbon is IBM's open source design system for products and digital experiences. With the IBM Design Language as its foundation, the system consists of working code, design tools and resources, and human interface guidelines.

Users are given the freedom and flexibility to configure personal workspaces based on their role, responsibilities, and working style using simple drag and drop components. The Carbon Design System gives all the UIs a consistent look and feel, which aids the user learning experience.

Furthermore, the Carbon Design System improves developer agility when building and supporting deployments, and easily making UI customizations.

Overall, this accelerates the UI development process, ensures faster adaptation to customer needs, and promotes faster adoption, enabling users to focus more on meeting customers' needs, rather than on learning the platform's technicalities.

Finally, by utilizing innovative modern technology components like Angular, Lerna and Single-spa and a micro-frontend architecture, the platform supports rapid deployment, seamless upgrades, and accessibility for differently abled users.

Read more about the award-winning Carbon Design System →

|C Previous chapter Next chapter 9

Insights to Analysis to Action for the business user

The Order Hub user experience gives you complete visibility into fulfillment operations by combining business tools and analytics into a single UI.

This redefined user experience groups together core related activities, framed by a pattern of Insights to Analysis to Action.

The following key capabilities in Order Hub help provide a modular and modern user experience that enable user flexibility:

 Create your own personalized Workspace with dashboards to keep a close watch on metrics and key performance indicators across your fulfillment network in real time.

- Visualize the performance of a fulfillment location, drill down into fulfillment activities, analyze issues with an intuitive interface that provides a detailed view of nodes and orders.
- Alerts Rules allow you to get timely notifications about orders or shipment status and stay proactive to catch fulfillment risk early.
- Take corrective actions right from the UI. Turn off low performing fulfillment locations or adjust capacity to fulfill orders as soon as you see a shift in order volume. Reassign orders to prevent backlog.

Overview of Order Hub →

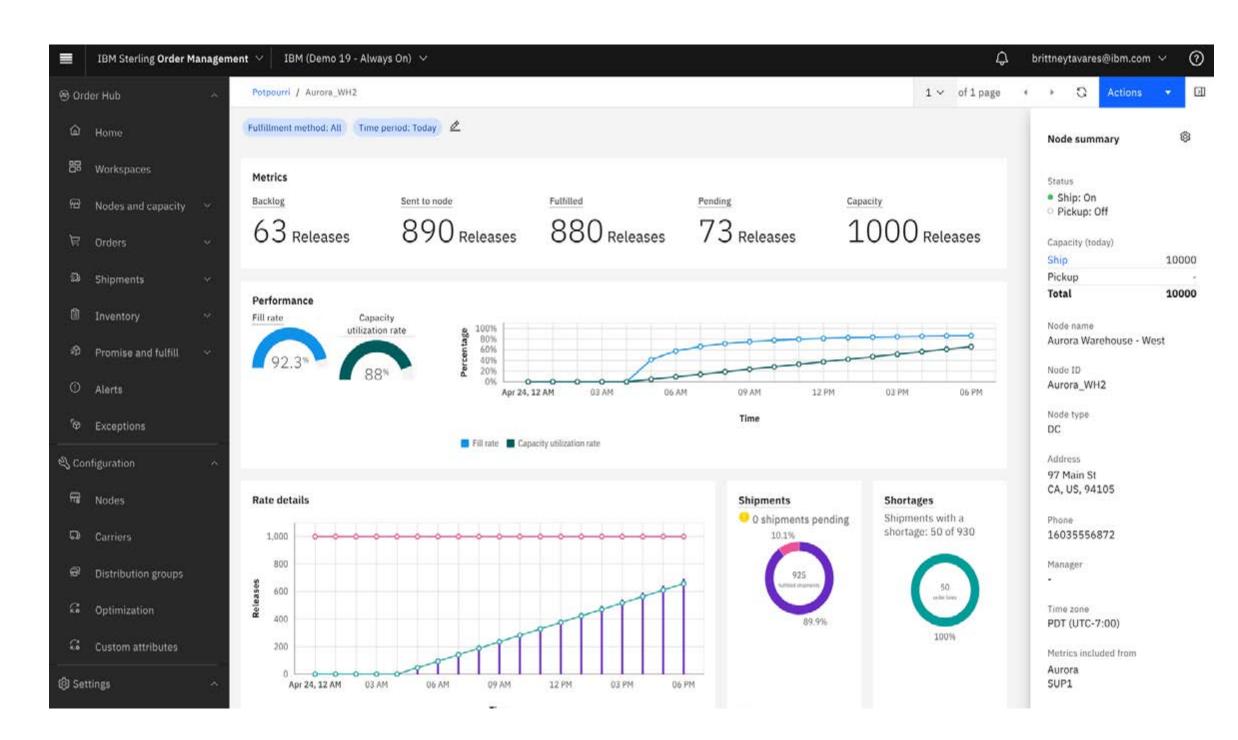


Figure 2. IBM Sterling Order Hub UI allows the user to view workspace analytics, nodes capacities, orders, inventory, shipments and fulfillment promises.

Transparent decision making to build customer trust

Our solution helps elevate customer experiences by supporting a wide range of fulfillment options, that include Curbside Pickup, Buy Online Pickup in Store (BOPIS) and Ship from Store (SFS).

To achieve this, IBM Sterling Intelligent
Promising uses advanced algorithms to
route orders to the most efficient fulfillment
option, while intelligent order promising
capabilities ensure accurate and
on-time delivery—thus boosting
customer satisfaction and loyalty.

This guarantees shoppers a greater sense of reliability and certainty, increased choices and more transparency across their buying journey.

As for retailers, the IBM Sterling Intelligent Promising UI empowers them with the ability to improve their digital conversions and in-store sales while increasing their omnichannel profitability.

It gives retailers the ability to make promises in real-time, with dynamic visibility into their inventory and optimized fulfillment through intelligence that seeks to minimize total cost-to-serve.

Intelligent Promising Overview →

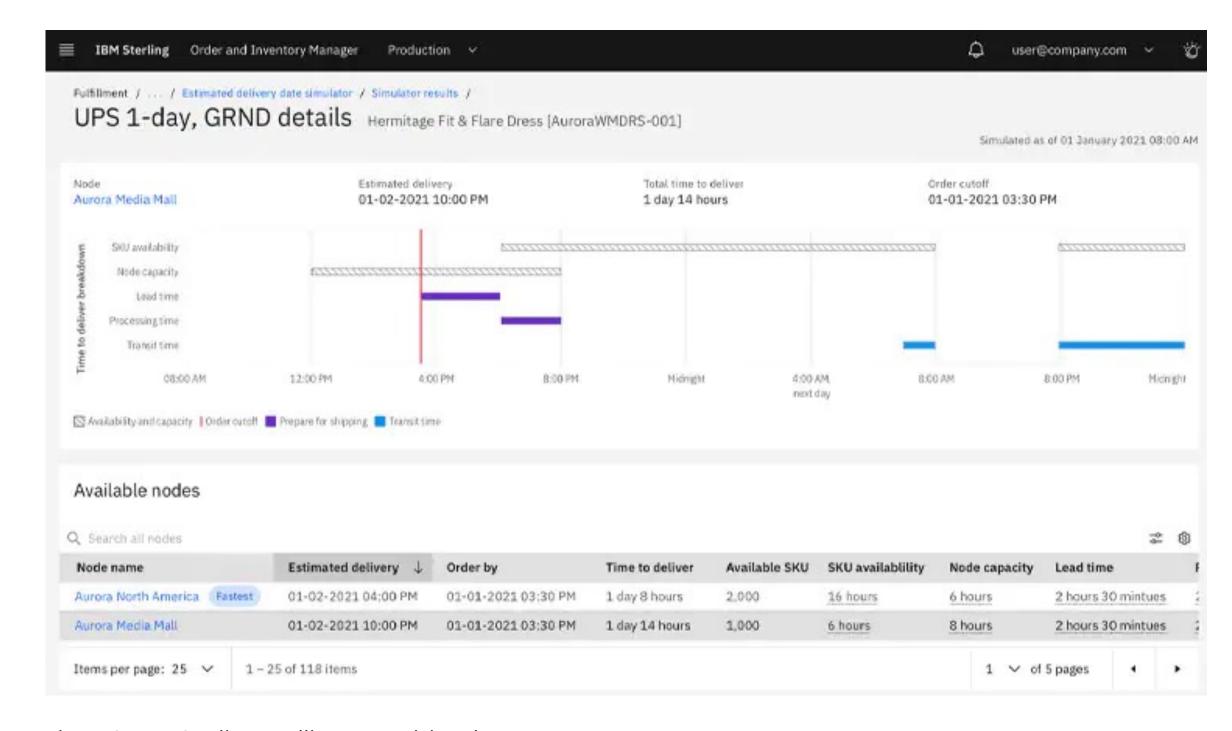


Figure 3. IBM Sterling Intelligent Promising shows a simulation of expected delivery dates based on AI-optimization.

Empower store associates to deliver exceptional experiences

IBM Sterling Store Engagement empowers store employees and managers to deliver superior customer service—whether it be for an online purchase, in-store purchase, or for backend fulfillment and inventory management.

Store employees can use IBM Sterling Store Engagement to standardize tasks, recommend cross-sells and up-sells, and provide customers with suitable fulfillment options for their purchases. Store managers can use the store manager dashboard to track and monitor store KPIs.

The Store Manager dashboard enables the user to quickly track, monitor, and analyze KPIs of importance to them.

The Store Manager dashboard helps them to understand the key performances of their supply chain operations and are also able to drill down into each KPI for granular details that measure the performance metrics so that they can take immediate actions.

Store Engagement Capabilities →

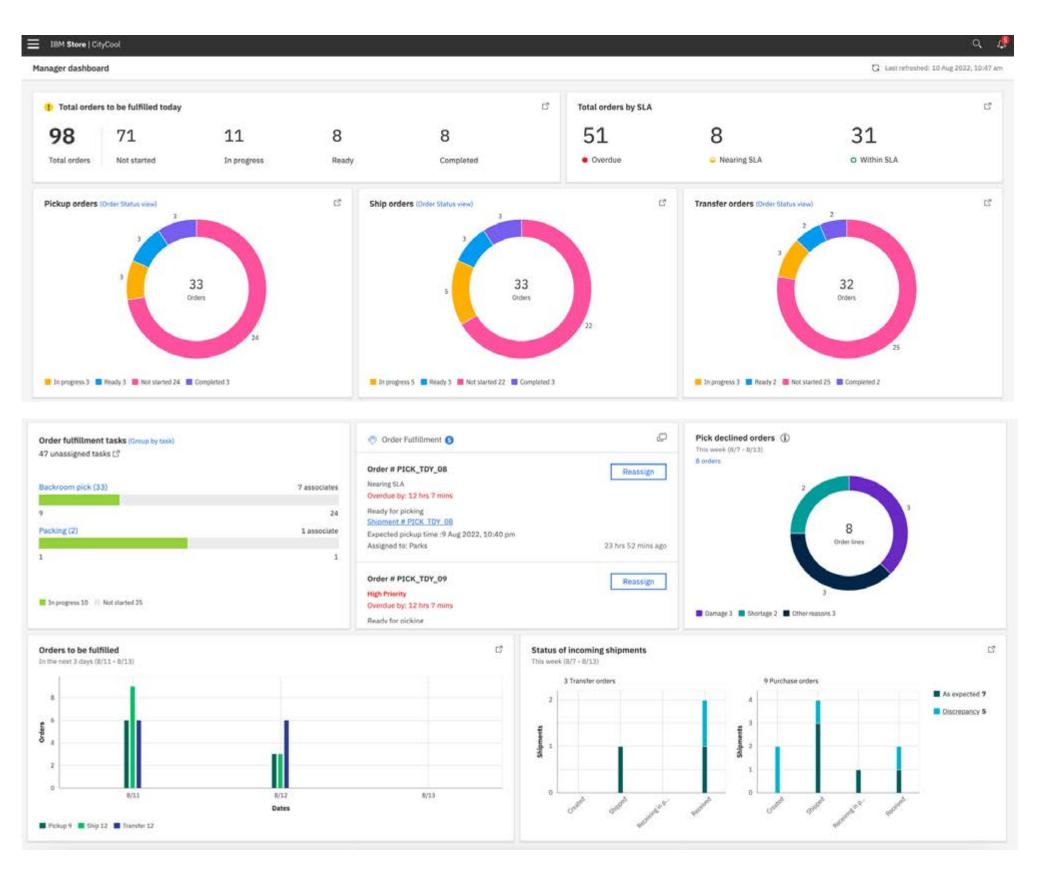
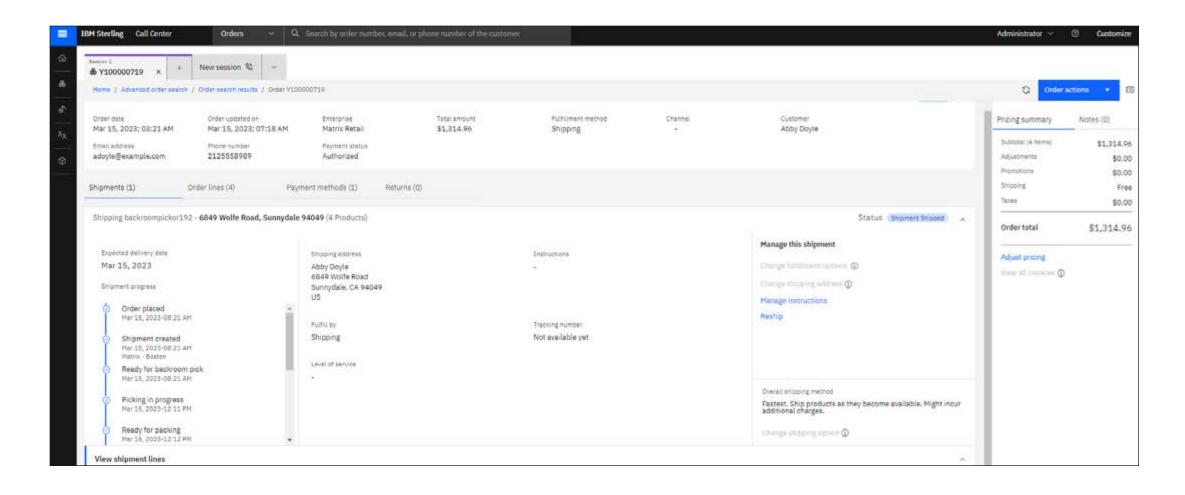


Figure 4. Store Engagement manager dashboard gives supervisors tracking and monitoring of operational KPIs.



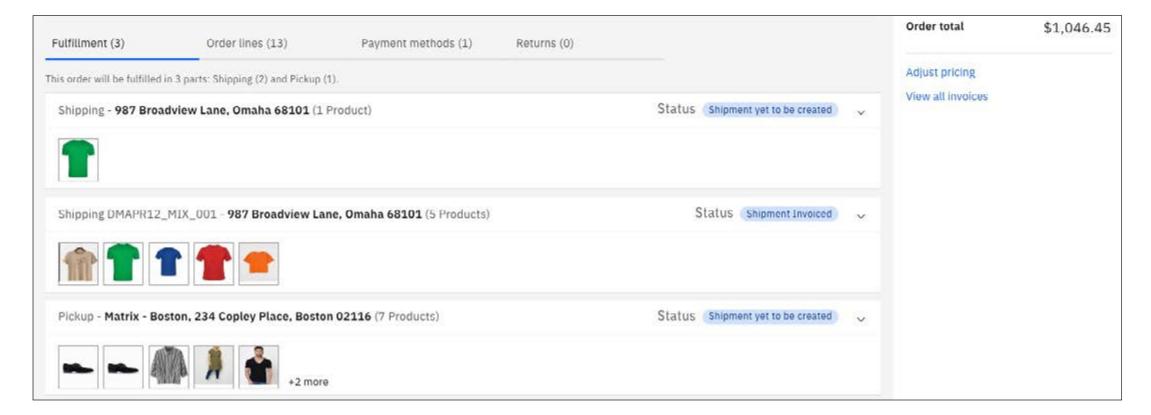


Figure 5. IBM Sterling Call Center enables CSRs to quickly start new sessions to view the progress of customer orders, with options to take action on customer inquiries.

IBM Sterling OMS is on a continuous journey of modernization and innovation

Efficient Customer Service

IBM Sterling OMS provides an easy-to-use Call Center that enables Customer Service Representatives (CSRs) to create, view and perform complex order modification tasks.

CSRs can handle several calls at the same time by opening multiple sessions grouped by customer interaction, allowing them to efficiently conduct Customer Inquiries, Order Creation, Order Modification, and Order Returns and Exchange tasks in parallel.

Call Center also allows the CSR to have a single view of customer transactions to enable more relevant cross-sell and up-sell discussions with customers.

It permits scheduling deliveries and appointments efficiently and also provides the ability to take over a customer's online cart to reduce cart abandonments.

This Call Center is a prime example of how IBM has designed and built UIs with the customer experience in mind through our Sponsor User Program. This Sponsor User Program is a co-creation program that allows users to give product input through the design and enhancement stages of product development.

Overall, IBM Sterling OMS offers users freedom and flexibility to choose how they want to work through an intuitive and modernized user experience that is built with customers—for customers.

See how IBM's Sponsor User program helps us collaborate to reimagine UX →

Flexible Architecture

IBM Sterling Order Management is built with unmatched flexibility of architecture to ensure that businesses can select and compose the solution that works for them—now and into the future



Composable platform

To support freedom and flexibility, we have extended our prior leadership in SOA principles to incorporate a microservices-based, API-first approach to creating a composable OMS architecture. This allows businesses to compose the OMS platform that fits their needs based on our platforms' services.

Businesses can greatly reduce time to value by bringing in modular functionality at their own pace and integrating them with incumbent solutions.

A robust set of headless APIs enables easy integration with existing enterprise systems, such as CRM, ERP, and WMS.

Deployment freedom

A cloud-native architecture, built with a headless design that can be paired with any UI, enables deployment using universal technologies like Kubernetes onto any hybrid, private or public clouds. We call this: My Cloud. Your Cloud. Any Cloud.

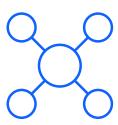
IBM is the only vendor that provides the flexibility for your modular components to be deployed per the model of your choice.

IBM provides speed and agility for fastpaced development environments, while also bringing significant savings in operational costs through containerized architecture models.

|C Previous chapter Next chapter 14

Composable platform

Spend time building, not integrating



Open APIs with security

Open APIs make IBM Sterling OMS the platform of choice, where you can build extensions and easily integrate into 3rd party software for an expanded solution footprint.

A microservices-based architecture designed with enterprise grade security, enables quick development using APIs without compromising on safety and trust. Easily authenticate trusted applications and expose only the data that you need to.



Modules that make sense

IBM Sterling OMS is built with modules that make business sense. We make the consumption of modules easy with purpose built microservices bundled together to provide functionality—so you can focus on your business needs and not on backend integration.

Modular components are built on a common platform to provide business agility without interdependencies between individual services. This makes it easy for businesses to continuously upgrade and deliver the right business functionality in manageable waves.

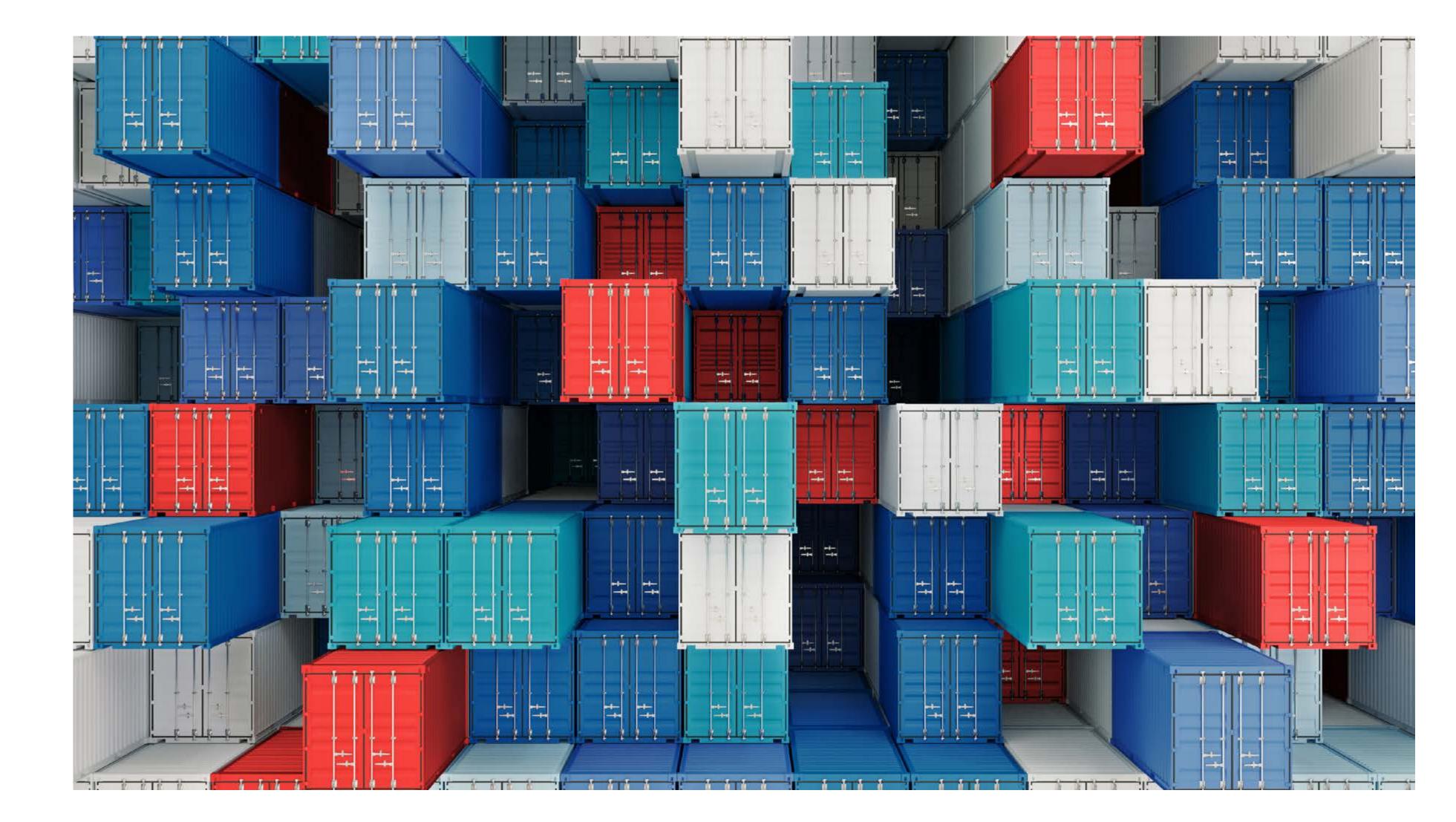


Headless for flexibility

The Sterling OMS platform is designed with a decoupled back end and front end, allowing businesses to choose the pace of adoption and innovation independently.

Invest in front end development and deploy more often while keeping the backend applications resilient to the changing solution landscape.

With a headless platform, you can stay nimble to respond to market needs faster and deliver quicker changes where it matters the most. IBM Sterling OMS offers a robust platform with modular microservices, that allows businesses to stay nimble with the pace of innovation and customizations. Whether it is back-end APIs or front-end UIs, businesses can choose the module they want to extend and integrate it with their supporting ecosystem with ease—reducing the time for upgrades or new feature roll-out.



16

Deployment freedom

Take your solution where you choose



Cloud-based model

IBM Sterling OMS offers a cloud-native architecture that ensures optimal performance and reliability, and its advanced security features ensure that customer data is always secure.

The cloud-based model is ideal for businesses that want to reduce costs, enhance scalability and eliminate the need for on-premises hardware.

Cloud options including SaaS on the IBM cloud or deployment on any public cloud of choice, allow businesses to take the technology decision that's right for them.



On-premises model

IBM Sterling OMS can easily be deployed on-premises, and its advanced architecture ensures that the solution is highly reliable and scalable.

The on-premises model is ideal for businesses that want to maintain complete control over their OMS solution and prefer to keep their data in-house.

A containerized platform and microservices allows businesses to architect for ondemand scale at par with public cloud architecture, without the drawbacks of shared infrastructure.

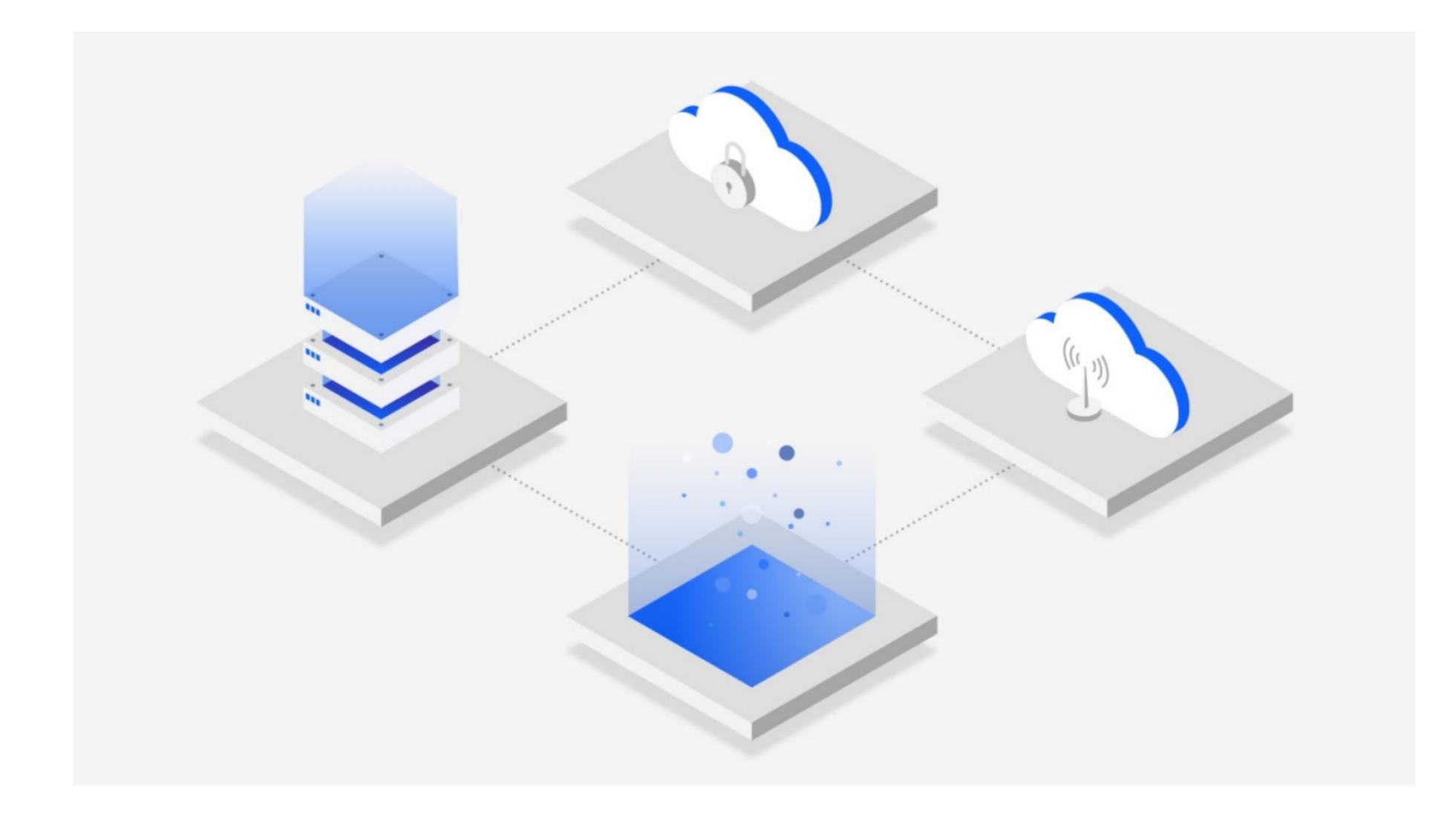


Hybrid model

The hybrid model combines the best of both worlds, allowing businesses to leverage the benefits of both cloud and onpremises deployment models.

Hybrid deployment allows for the gradual adoption of modular microservices from cloud into the traditional on-premises architecture.

With hybrid deployment, businesses can keep sensitive data on-premises while leveraging the scalability and flexibility of the cloud. IBM Sterling OMS offers various deployment choices, including cloudbased, on-premises, and hybrid models, to cater to diverse business requirements. The platform can be deployed in a multitenant or single-tenant environment, and businesses can choose from a range of hosting options, including dedicated, shared, and virtual environments.



Why it matters

"When customer behavior changes, we need our technology platform to react to that. A flexible architecture enables us to pivot and know where we're investing our time."

Ope Bakere

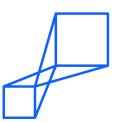
Vice President and Chief Enterprise Architect Hudson Bay, Saks Fifth Avenue



Tailor deployment by region

With IBM Sterling OMS, you can deploy a SaaS model in North America and still choose to deploy a public cloud alternative in mainland China to ensure compliance with local laws; or even start with a SaaS model and then lift and shift everything to a self-managed model on a public cloud of choice.

Having a flexible, composable and transferable platform as the backbone of your architecture enables your business to stay agile and responsive ahead of changing market needs in each region.



Scale without risk

The fundamental philosophy behind a flexible architecture is freedom of choice in both pace of adoption as well as backend infrastructure. This philosophy makes IBM differentiated from other OMS solutions today, which utilize only one go-forward deployment model that inevitably restricts you to the strategy of today.

Our solution helps your business to be ready as you expand by revenue size, geography or by acquisition. As a trusted partner, IBM helps minimize business risk and enable different journeys using a shared platform built for freedom and flexibility.

Transparent, Trustworthy, Transformative AI

IBM Sterling Order Management's intelligent promising capabilities emphasize trust and transparency to optimize profitability while delivering on customer choice

Transforming the shopper experience from Discovery to Delivery

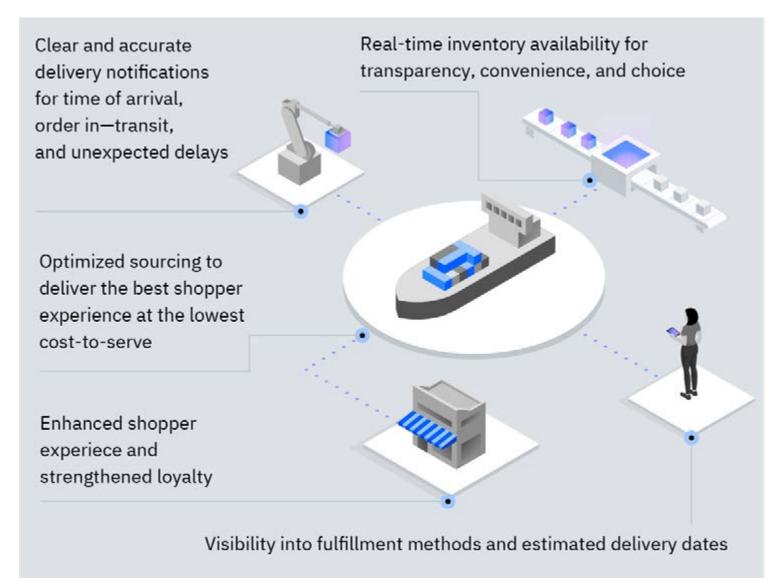


Figure 6. Today's shopper demands transparency and trust across the shopping journey.

Transparent AI that you can trust to run your business

IBM believes that the foundation of AI must be built on the Principles for Trust and Transparency. The intelligent promising capabilities delivered by IBM Sterling OMS emphasize this trust and transparency in several ways.

- Users gain trust from a dynamic solution with Machine Learning (ML) that learns unique sell-through patterns and maximizes customer satisfaction overtime.
- Fulfillment managers gain trust in the solution through built-in explainability that explains the logic behind shopper promises and optimized decisions.
- CFOs gain trust with outcome KPIs presented alongside "what-if" scenarios that highlight the impact and incremental gains from ML enhanced decision making.

Our next-generation OMS also affords today's shoppers transparency and trust as part of a transformed commerce experience.

Discovery: An early and accurate Expected Delivery Date (EDD) on product pages. Greater transparency around product availability, pickup or delivery options

Checkout: Greater choice in the Checkout experience, with options for sustainabilityconscious shoppers

Fulfillment: Build shopper trust through on-time and accurate order shipments

Read more about IBM's commitment to Trustworthy AI →

|C Previous chapter Next chapter 20

Using AI and machine learning, an OMS can analyze a vast number of inventory scenarios through the lens of profitability

ML to identify profitable sell-through patterns

Intelligent Promising offers AI/ML based order fulfillment optimization, which orchestrates the best options to fulfill shopper promises while still maximizing the business' profitability goals.

This involves applying ML to identify profitable sell-through patterns. For example, retailers can systematically and strategically avoid heavy markdowns by selecting fulfillment from stores with excess inventory; or they can mitigate shopper unhappiness and lost revenue by ensuring that stores with low inventory and high demand stock up on key inventory. Retailers benefit from a single source of inventory truth, a master view of availability, supply, and demand, and item level performance to eliminate overpromising and cancellations.

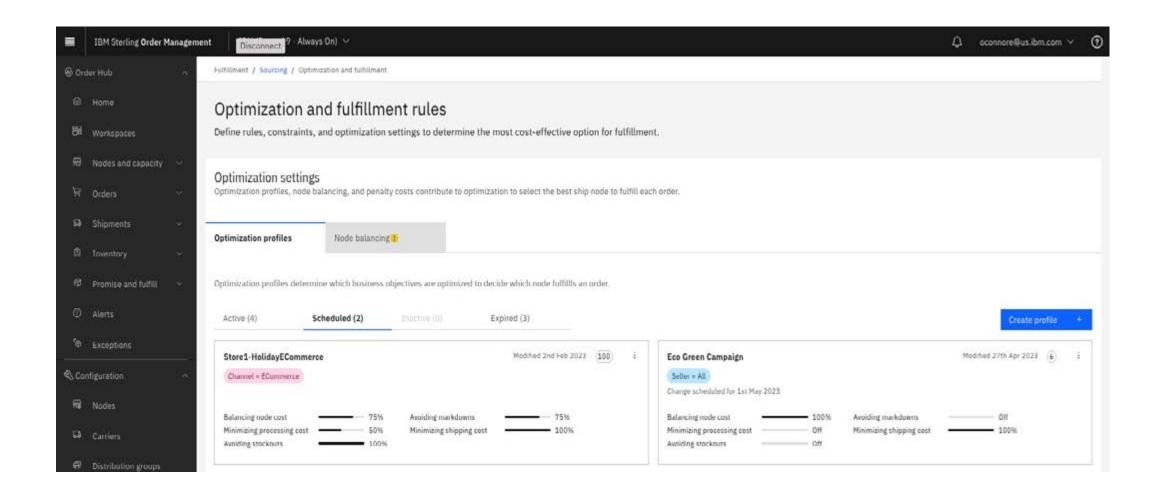


Figure 7. Optimization profiles can be created and scheduled when varied outcomes are desired. Optimization settings allow different weights to be considered for sourcing to the best fulfillment node.

The AI in fulfillment optimizer learns over time to make smart decisions. Here it has identified a pattern of demand vs inventory stock that it will apply to future online orders to ensure that long term profitability is maximized.

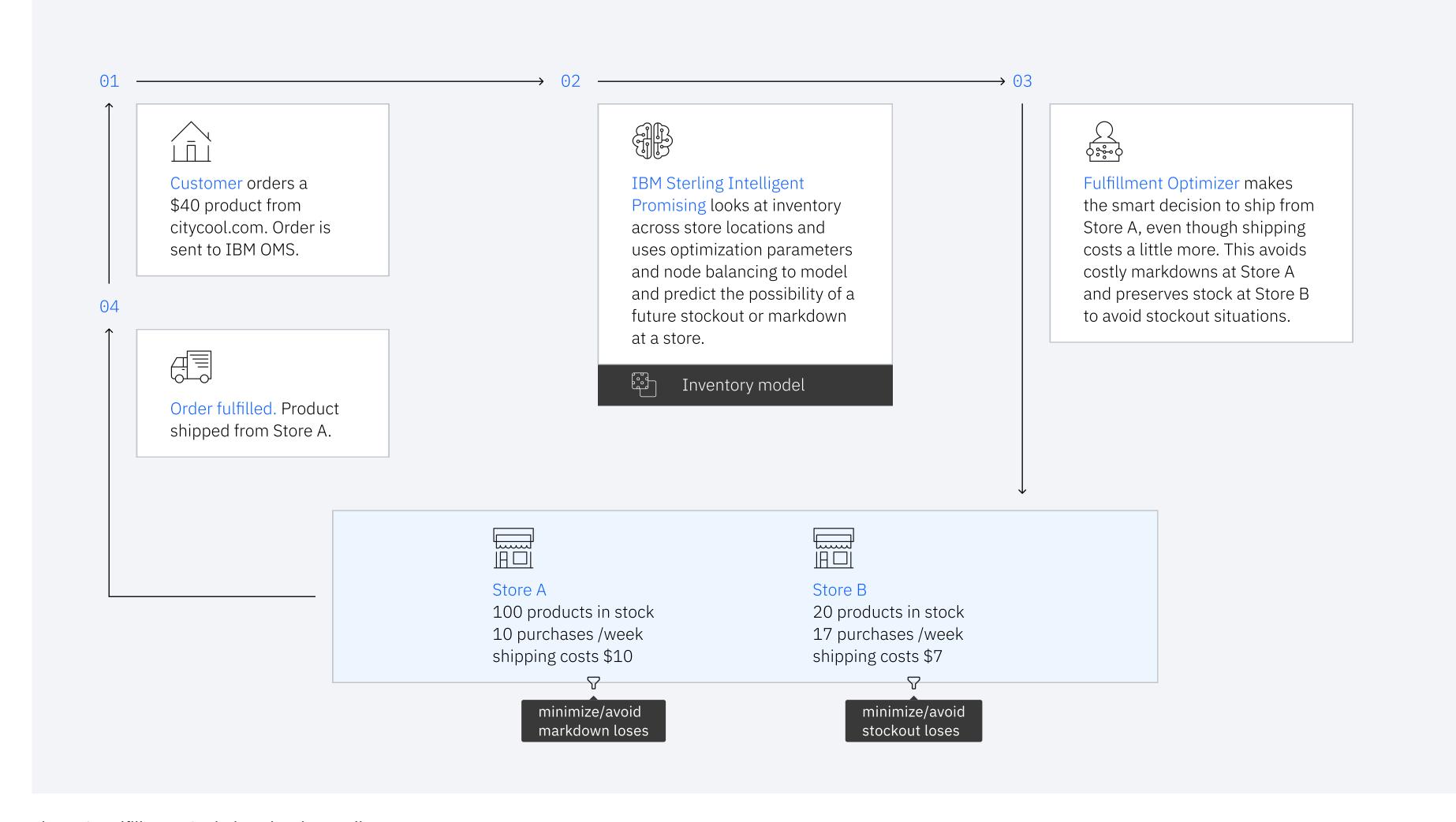


Figure 8. Fulfillment Optimizer develops sell through patterns to help maximize revenue for retailers.

Retailers need a transparent view into the AI that allows the retailer to follow the logic behind the decisions.

Built-in explainable AI

To trust AI, you must understand it.

Intelligent Promising Optimizer Explainer provides the Fulfillment Management (FM) cost factors of each node considered in the order sourcing decision, moments after it's made.

It provides transparency as to why a specific ship node(s) was selected for an order, the variables of each item and the cost breakdown of the winning and losing nodes.

With real-time data visualization, retailers can gain deeper insights into their operations to inform decision-making.

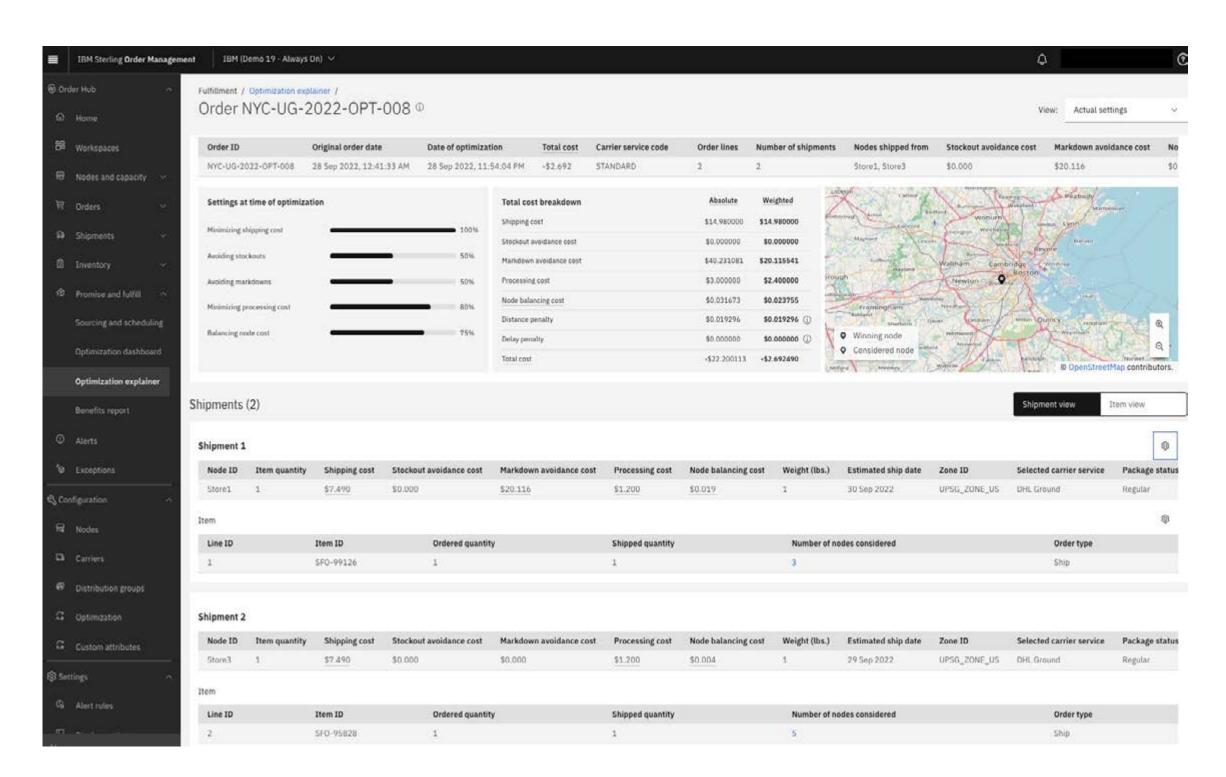


Figure 9. In Optimization Explainer, we see the optimization settings at the time of an order, and a decision made for a split shipment. We can also see the best node was selected avoiding a costly markdown of \$20 for a likely overstocked item.

KPIs and What-If? scenarios

The platform's built-in Benefits Report helps Fulfillment Managers measure the effectiveness of their strategies through Key Performance Indicators.

The fulfillment manager is also provided with shadow KPIs, to compare existing results with those without fulfillment optimization. These shadow views are invaluable in building executive stakeholder confidence in the AI model efficacy, comparing the variable outcomes, and showcasing positive results.

What gets measured, gets improved.

By providing enterprises with the tools necessary to measure the success of order fulfillment strategies, IBM Sterling Intelligent Promising can help them better meet profitability and cost reduction goals.

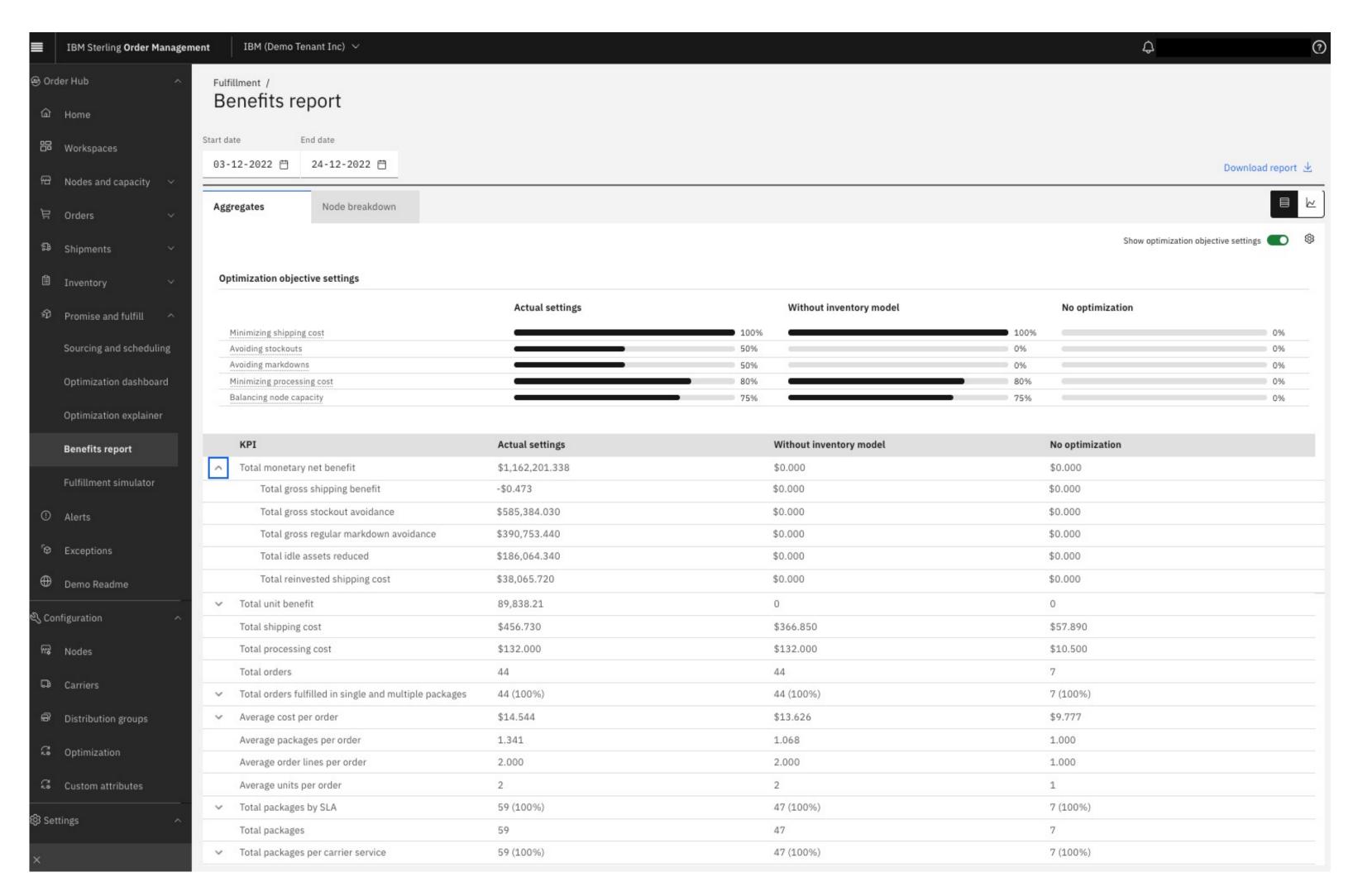


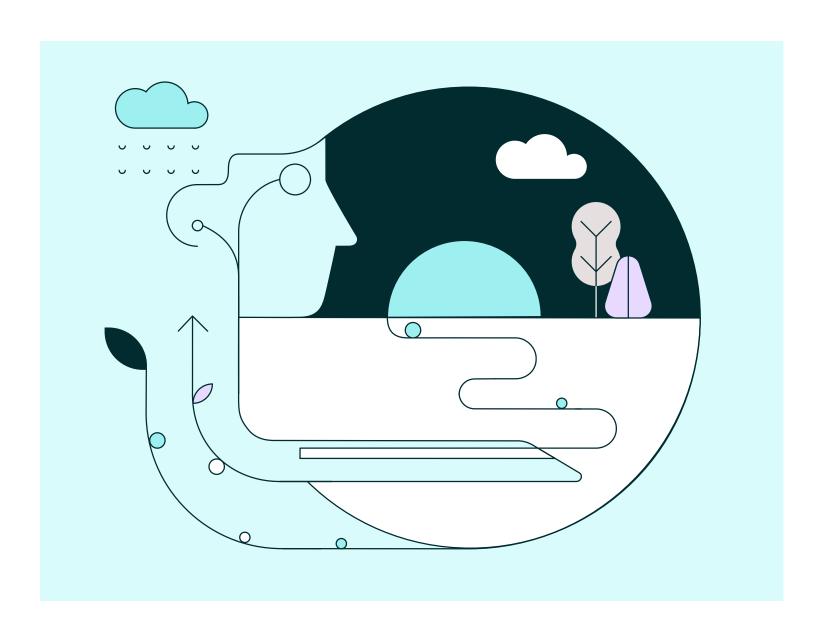
Figure 10. The Benefits Report provides three views—results from actual settings, results if the ML for stockout and markdown avoidance was ignored, results without any optimization. This helps the Fulfillment Manager realize the full benefits of the solution and impact of the AI optimized decisions.

Because of the many paths required to meet consumer demand for flexibility, retailer profitability will take a hit without intelligent promising.

Previous chapter Next chapter 25

Customer-focused Sustainability

IBM Sterling Order Management is designed to provide companies and consumers the flexibility of informed fulfillment choices aligned with their business and personal sustainability, social responsibility, and environmental, social, and governance (ESG) goals.



The sustainability data gap

Nearly 6 in 10 consumers are willing to change their purchasing habits to help reduce negative impact to the environment.⁴ Furthermore, 82% of consumers would choose a more environmentally friendly delivery option, even if it costs more.⁴

However, only 4 in 10 say they have enough data to make environmentally sustainable purchasing (41%) decisions.⁵ Providing data like better product availability and how purchases contribute to social responsibility can encourage more sustainable shopping.

Read how IBM can help you build a more sustainable supply chain →

Enable consumer choices for sustainable shopping

Our solution provides visibility into sustainability data, allowing businesses to empower consumers to make sustainable shopping decisions aligned with their personal values.

Carbon savings data can be fed to upstream e-commerce experiences for consumers to see the carbon impact of their current shopping choices, as well as potential carbon savings from taking more sustainable actions like delaying shipments or consolidating purchases.

The hallmark of a strong global best-ofbreed product is future-proofing customer investments by providing solutions that recognize changing customer aspirations and values and innovating for a planetconscious future.

|C Previous chapter Next chapter 26

Optimize fulfillment operations and minimize carbon footprint

IBM Sterling OMS's flexible platform enables carbon-friendly decisions when selecting source-target shipping locations, and carrier and service options during the order orchestration.

It is a platform that flexes and provide options for the client company to achieve their profitability and sustainability goals and gives their brand a competitive edge, especially in an evolving fulfillment network and an ever-changing logistics landscape.

OMS uses carbon footprint data from carrier systems and carbon accounting engines along with inventory and capacity data to compute a composite carbon footprint score, illuminating the environmental impact of various delivery options.

This information allows the presentation of a carbon savings dashboard to fulfillment managers, enabling a feedback loop for further optimization of operations.

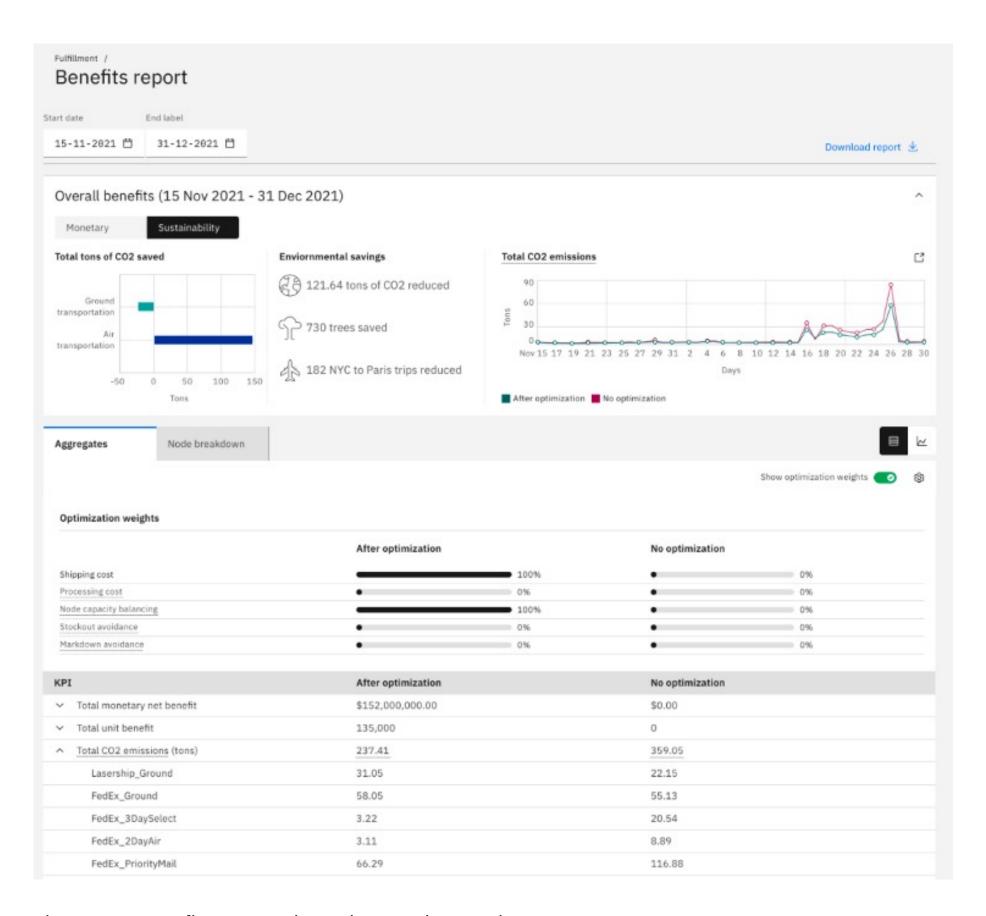


Figure 11. Benefits report shows how carbon savings are optimized across fulfillment operations including owned-fleet, parcel carriers and LTL carriers.



Supply chain circularity and minimizing inventory wastage

Unsold inventory and returns have a very high financial and environmental cost. Recirculating returned items into forward fulfillment and utilizing soon-to-be marked down merchandise from warehouses and stores, helps reduce reverse logistics costs and avoids products ending up in landfill.

Robust inventory visibility tools unlock safety stock within the network, which enables companies to sell down to the last unit of inventory. This minimizes GHG emissions from unplanned end-of-season vendor returns. Greater visibility into inventory also means companies can reduce artificially escalated safety stock levels, thereby freeing up inventory to be shipped to customers.

Our solution also helps minimize wastage by supporting re-commerce of returned inventory, enabling retailers to maximize inventory life through circularity incentives like refurbishment and repair.

For products that can be easily repaired for resale, OMS provides the capability to track the repairs through work orders with its circular re-commerce journey.

Similar benefits extend to 'open-box' items, potential markdown items, seasonal goods, cosmetics and medicines with short shelf-life, all of which can be recirculated faster using the visibility and promising capabilities of the solution.

A very unique problem that only IBM Sterling Order Management can solve is the ability to prioritize 'remaindered' or 'out of place' inventory—such as online-only items that were returned to a store. When these items are shipped first, it saves return transportation costs and rewards store managers with a bonus 'revenue per sq foot' for their store.

These examples of Recirculation, Repair, Reuse illustrate the flexibility provided by a future-ready platform to help companies make thoughtful changes that are better for both profits and the planet.

Why it matters

"GEODIS is committed to solutions that improve the environment. With IBM OMS we are able to reduce emissions by ensuring orders are routed to the nearest fulfillment location.

In addition, IBM OMS allows us the ability to hold orders until all inventory is available to reduce multiple parcels for one shipment."

Pal Narayanan

EVP & CIO GEODIS in Americas

Commit to more sustainable retail operations

To stay ahead of market disruptions, businesses must think ahead to a future that is more collaborative, competitive, and differentiated. We believe that supply chain sustainability is key to that future—as do 73% of CEOs, who say that becoming a sustainable and responsible business is a top priority over the next three years.⁶

IBM Sterling OMS is the ideal choice for businesses aiming to positively tackle the challenge of operationalizing sustainability into retail order management, with enough flexibility to promote consumer freedom of choice.

|C Previous chapter Next chapter 29

Conclusion

IBM Sterling OMS allows you to evolve your business operations and embrace technology freedom to create the unique supply chain that fits your business

Embrace technology freedom of choice for the future

With over 20 years of experience in the order management space, *IBM Sterling OMS is the market leader* in omnichannel fulfillment.

Combining modern architecture, advanced AI and ML algorithms and unmatched deployment flexibility, IBM Sterling OMS offers unparalleled freedom of choice. Through constant release cadences and agile, easily consumable updates, IBM continually listens to customer feedback, using it to inform and improve its product roadmap.

Furthermore, our specialized partner ecosystem can extend any use case to flexibly fit your specific business complexities—because no two supply chains are ever exactly the same.

The next generation of order management technology aligns with this core vision, enabling organizations to cater to user preferences, grow seamlessly without disruption, and make trustworthy, sustainable data-driven decisions to drive customer satisfaction and brand reputation.

Talk to an expert to see how IBM can transform your business today →

|Compared to the Previous chapter | Previous chapte



- The Order Management Market 2022: An IHL Retail Executive Advisory Program Research Study
- 2. G2 Crowd reviews and ratings
- 3. IDC, April 2023. The Essential Guide to Engaging Customer Experiences with Intelligent Promising.
- 4. IBM IBV 2021. Consumers want it all: Hybrid shopping, sustainability, and purpose-driven brands
- 5. IBM IBV 2023. The ESG data conundrum
- 6. Sustainability matters to CEOs. It needs to matter more and faster. (Accenture, 2022)

© Copyright IBM Corporation 2023

IBM Corporation New Orchard Road Armonk, NY 10504

Produced in the United States of America July 2023

IBM, the IBM logo, and IBM Sterling® are trademarks or registered trademarks of International Business Machines Corporation, in the United States and/or other countries. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on ibm.com/trademark.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS
PROVIDED "AS IS" WITHOUT ANY WARRANTY,
EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY
WARRANTIES OF MERCHANTABILITY, FITNESS FOR
A PARTICULAR PURPOSE AND ANY WARRANTY OR
CONDITION OF NON-INFRINGEMENT. IBM products
are warranted according to the terms and conditions
of the agreements under which they are provided.