

VusionGroup

**Driving Performance &
Sustainability in e-Commerce
with Store Digitalization**

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● How to win the e-Commerce battle & make it a profitable growth engine

Driving Performance & Sustainability in e-Commerce with Store Digitalization.

e-Commerce is growing rapidly. Retailers must win the battle to stay competitive and if they do not want to miss out on the only growth segment of the years to come.

In recent years, all retailers have developed an omnichannel offering and increased their online sales, while Covid has also been a major accelerator to that process.

In grocery, online sales are mostly the result of retailers that became omnichannel through curbside pickup offers and delivery, as pure players have remained relatively marginal.

However, the equation facing retailers is a complex one: because of the necessary investments, the costs of order preparation and logistics, the net profitability of e-Commerce is negative or close to zero. Traditional e-Commerce strategies leveraging centralized standalone fulfillment centers are too expensive, unsustainable, and far from consumer expectations in terms of quality and speed. On the other hand, retailers – particularly in grocery – who have based their strategy on in-store preparation of online orders, are also faced with two challenges: the high cost of non-automated order preparation, and the limited capacity to serve demand.

So, how can retailers continue to support the growth of online sales without severely affecting the overall profitability of the omnichannel model and drying up investment capacity?

This publication presents a new, better approach: repurposing existing stores to enable a sustainable, profitable, hybrid retailing model at scale, and win the **e-Commerce battle!**

● The roadmap for a high-performance, sustainable e-Commerce model



● Sustainability in a Retail Revolution



BY REPURPOSING EXISTING ASSETS, retailers can play a pivotal role in reducing the carbon footprint associated with the establishment of new fulfillment centers and

Turning existing physical stores into efficient local fulfillment centers for online sales offers a sustainable e-Commerce solution. Up to 0.5 GT

logistical operations. Reinventing existing assets will take center stage as the global community grapples with the imperative to reduce the carbon footprint of business operations.

of CO2 emissions could be avoided by eliminating the need for new infrastructure.



LEVERAGING THE ECO SYSTEM of existing assets in tandem with forward-deployed inventory significantly reduces delivery distances. This, in turn, leads to improved lead times for customers and a reduced carbon footprint, particularly in the middle and last mile of delivery. Although the online grocery sector is still evolving, parallels can be drawn from studies

conducted in the General Merchandise sector. Research from Clean Mobility Collective and Stand Earth reveals that up to half of all supply chain vehicle CO2 emissions can be attributed to the last mile. Leveraging facilities close to customers for pickup and short delivery trips can substantially mitigate the environmental impact of this channel.



EDUCATING CUSTOMERS about stores as integral nodes in e-commerce also introduces the benefits of using them as return drop-off points. This not only aggregates reverse logistics

but also enables resale at these locations, further lowering the carbon footprint associated with customer returns.



¹ World Economic Forum - Davos Agenda - How turning retail stores into e-Commerce centres can avoid massive emissions"
<https://www.weforum.org/agenda/2022/09/retail-stores-into-ecommerce-centres-avoid-carbon-emissions/>

● Leveraging Stores : Briding the Gap to Customers

In the current evolving retail landscape, physical stores are no longer mere spaces for transactions but have transformed into pivotal nodes within the supply chain. Forward-looking retailers have recognized the immense potential of leveraging their existing store network and forward-deployed inventory to enhance efficiency, reduce delivery times, and shrink their carbon footprint. By

Shipping products to customers from local stores instead of centralized distribution centers not only minimizes long-haul transportation but also reduces associated costs and carbon emissions. Recent analysis by Bain indicates that, for large retailers, shipping from stores can be up to **30% more cost-efficient** than direct shipping from distribution centers. For smaller retailers, the efficiency gains can be even greater, **reaching up to 50%**.

To fully harness the potential of e-commerce from the store, the adoption of best-in-class supply chain technology is imperative. This means transitioning from traditional

leveraging strategically positioned inventory within these store locations, retailers are converting them into distribution hubs capable of expediting order fulfillment. This transformation of stores into supply chain nodes is critical to meeting the mounting demands of e-commerce-savvy consumers. The grocery model works by shipping in pallets and picking/shopping in eaches.

systems to cutting-edge solutions that have already demonstrated success in other facets of the supply chain. Implementing advanced inventory management systems guarantees real-time tracking and optimization, leading to improved inventory accuracy and minimized stockouts. Optimized order fulfillment processes that reduce non-value-added activities and maximize tote utilization are essential. Additionally, the integration of artificial intelligence (AI) and machine learning (ML) enables businesses to optimize demand forecasting and create highly personalized shopping experiences.



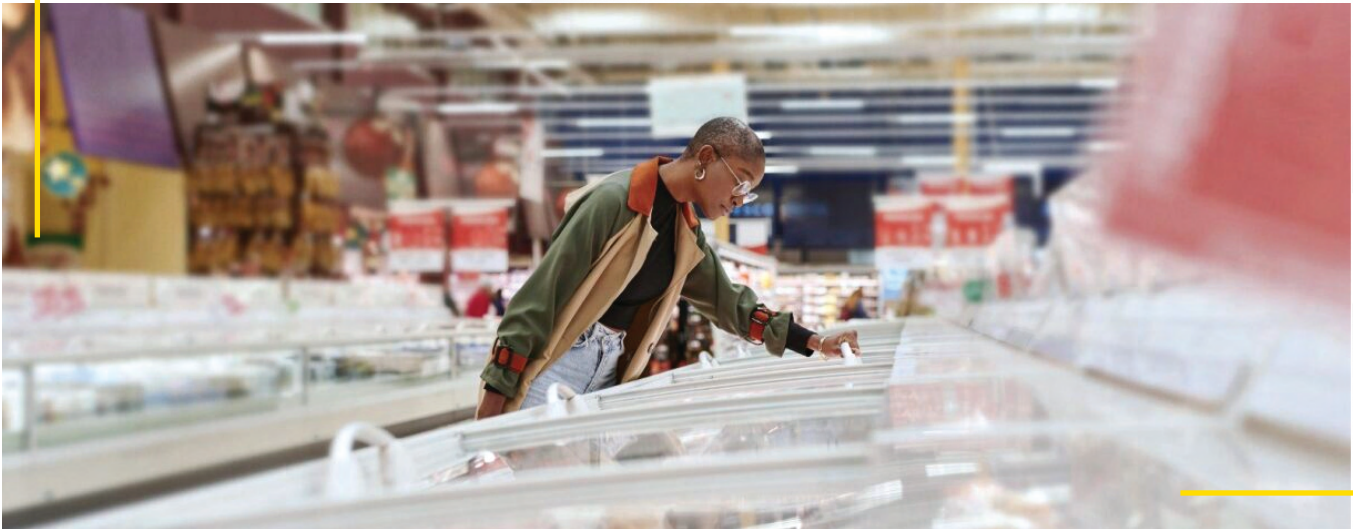
● Digitalizing the Shelf-edge

E-commerce fulfillment from stores presents its unique set of challenges, chiefly centered around ensuring product availability and accuracy. This necessitates accurate inventory visibility across both online and in-store channels. Consumers increasingly expect up-to-the-minute information on product availability, pushing businesses to invest in robust systems capable of managing complex e-commerce order workflows. Despite these challenges, the rewards for successful in-store e-commerce fulfillment are substantial.

Foundational elements are essential for effective fulfillment from stores. Achieving operational excellence requires a concerted effort across all departments, starting with the execution of modular setups, accurate product labeling, and seamless synchronization between physical and online inventory. In this digital age, the vision of the "connected

store" is to digitally link every facet of the retail ecosystem—from products and shelves to locations, buildings, associates, and customers.

We see a future where everything is connected to everything. Electronic shelf labels (ESLs) are integral building blocks in this journey. ESLs serve as powerful tools, providing clear, accurate pricing information, product details, and location guidance while streamlining stocking processes to enhance in-stock levels. They can also be employed to highlight featured products, such as those on end caps or pallet promotional spaces, optimizing stocking and ensuring product availability in multiple locations for both in-store and e-commerce customers. E-commerce associates are also enabled to pick from feature locations further protecting the in store customer experience.



After the implementation of this technology, the optimized modular paves the way for additional in-store operational efficiencies. These encompass price adjustments, enhanced stocking speed, and comprehensive product management, all of which contribute to cost savings for both in-store and e-commerce customers. Furthermore, accurate product location combined with customer data

opens the door to digitizing customer intent, potentially transforming it into a monetizable journey. Today **there are more eyes on the retailers' shelves than online**. All boats will rise on the tide of the improved in stock position and experience of the store, including the 80 - 90% of customers walking through the front door.

● Delivering World-Class Availability & Assortment

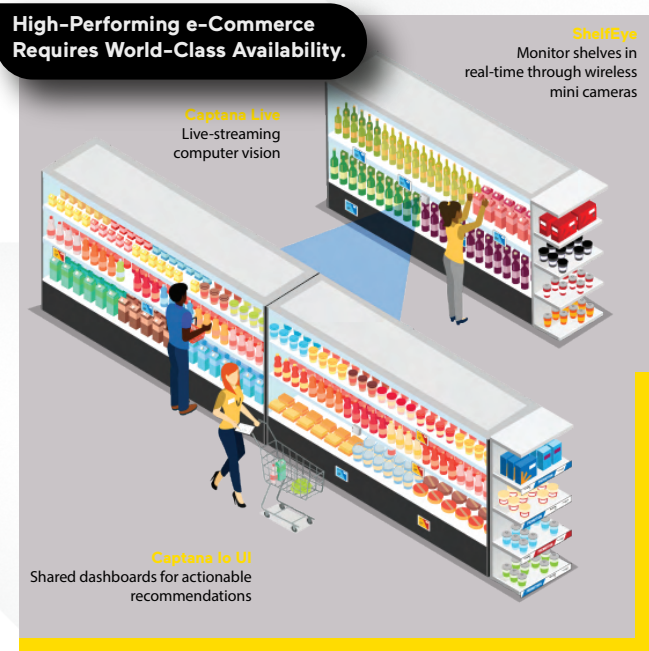
Gone are the days when customers settled for self-substituting items at the shelf when faced with out-of-stock products. Today, inventory accuracy and in-stock levels are pivotal to ensuring customer satisfaction in the evolving world of store fulfillment. Shoppers now expect precisely what they ordered, mirroring their experiences with general merchandise online shopping. Substituting missing items or having "ghost" inventory, where items appear in inventory records but are unavailable in-store, can result in equally disappointing experiences. With heightened competition, these frustrations can drive customers to switch retailers, particularly as the ease of setting up new accounts and building baskets online becomes increasingly frictionless.

Ensuring in-stock excellence necessitates a harmonized effort across the entire supply chain, spanning farms, factories, distribution centers, and stores. Consistency in replenishment processes and vendor delivery times are crucial, as are well-synchronized unloading and stocking schedules in-store. Real-time data can be harnessed in combination with camera systems and sales rate rules to provide instant insights into items requiring attention. In the worst-case scenario, e-commerce operations can act as early warning systems, pinpointing issues when associates encounter missing items during the picking process.

In the wake of the mass adoption of online grocery shopping, factors like product picking, substitutions, refunds, and errors are posing new challenges to maintaining perpetual inventory accuracy. This, in turn,

applies pressure on shrink and product availability, with the industry grappling with some of the highest shrink numbers in recent history.

The costs associated with substitutions and exception processes are now significant contributors to operational expenses. Research conducted by Prof. Daniel Corsten and Colin Peacock (on behalf of the influential not for profit ECR Group) suggests that these costs could add an additional \$2.00 in margin pressure per order. This arises from longer picking times for exception items, additional time spent searching for items in the backroom, costs associated with substituted products, and expenses tied to call center support and vouchers for customers dealing with exceptions that reach them.



In-stock excellence not only bolsters top-line growth and customer retention but also keeps exception costs to a minimum.

● Enabling In-Store Fulfilment

For associates operating in stores with small or vast product assortments, the ability to swiftly locate items is pivotal to boosting productivity and profitability. Have you ever watched an associate navigate a complex section like spices while searching for an item like Alum? It can be a daunting task, particularly when associates are under pressure to meet productivity targets and may be blocking in store customers. In distribution and fulfillment centers, technology often guides associates to the next pick location using lights. Outfitting stores with the latest generation of

electronic shelf labels (ESLs) can serve a similar purpose by signaling associates when they reach the correct shelf, **reducing search times by 10% to 30% in advanced operations or even 100%+ in less advanced setups**, and helping guide them through the aisles to the next item. By enabling associates to find the right item, ESLs also play a crucial role in preventing issues related to missing or substituted products, enhancing the overall customer experience.



Once associates locate items, they must determine which order tote each item should be placed in. Electronic tote labels (ETLs) prove invaluable in this process. ETLs clearly display tote numbers and can flash a light on the label to indicate the tote's placement location. This increases the speed of the placement but also ensures associates are getting the item to the correct customer.

Remarkably, billions of single-use labels are consumed annually to support these operations. ETLs offer a sustainable alternative, minimizing the need for single-use labels. This not only reduces the carbon footprint associated with label printing but also allows information on the labels to be updated multiple times throughout the process, ensuring accurate information is displayed when needed, further mitigating errors.



By embracing supply chain principles within the store, retailers can design associate processes that minimize failures and deliver simple, sustainable, and repeatable operations.

● Streamlining Order Staging and Sorting

Once completed order totes reach the backroom, ETLs play a pivotal role in streamlining processes for associates. As the pick walk concludes, all tags can be updated, providing clear directions for associates on where to place orders. This enables the presorting of orders based on pickup time slots or delivery trucks, facilitating more efficient downstream processes for preparing customer orders or

loading delivery vehicles. When customers arrive or trucks are ready to be loaded, ETLs can flash to help associates quickly locate orders within different temperature zones (ambient, chilled, and frozen). This reduces the risk of associates selecting the wrong tote for customers, averting errors and exception handling.

● Generating Sustainable e-Commerce Growth

In the realm of innovation, the true worth of the solution kit becomes apparent, transforming an erstwhile unprofitable model into a gain for both the top and bottom lines.



Up to **-30%**
cost reduction to fulfill an order.

For those sophisticated pioneering retailers in the online grocery sphere, though starting at a lower operational cost, will enjoy a remarkable **10% to 15% reduction in cost to fulfill an order**, while those less sophisticated in advanced practices can achieve productivity improvements ranging from a substantial **20% to 30% or even more**.

Use of cutting-edge camera technology extends beyond operational optimization. It allows fine monitoring of seasonal merchandise or challenging in stock assortments, thereby generating precise in-stock signals for the website. As a result, we ensure the online assortment remains fully available to customers, even as quantities dwindle, as well as providing a signal to take items off the website quickly when items are out of stock.

This orchestrated approach significantly enhances the customer experience, contributing to a notable 20% to 30% increase in basket size and a 15% to 25% boost in gross profit mix during seasonal periods. Over the course of a year, this translates to an impressive \$4 to \$5 added to the average basket and a substantial 7% to 9% increase in profitability.

When we combine these notable gains in colleague productivity with the enhanced economics of bolstering seasonal general merchandise, a vision emerges—a **future where running a profitable eCommerce business from your stores becomes an attainable reality**.



● Seizing the Future with Technology

The future of best-in-class e-commerce from the store is grounded in the strategic integration of advanced technology, seamless omnichannel experiences, hyper-personalization, and innovative last-mile delivery solutions.

By leveraging stores as digital nodes within the supply chain and adopting a comprehensive portfolio of technology solutions, retailers can position themselves at the forefront of the e-commerce revolution.

Solutions such as ESLs, ETLs, machine vision and advanced analytics create an IoT platform that connects products, locations, associates, and customers in innovative ways. This not only leads to a profitable online grocery business but also aligns with sustainability goals, delivering value to customers and shareholders alike.

The reimagining of stores and leveraging of existing retail infrastructure represents one of the most profitable and sustainable avenues for retailers to unlock their future potential.



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