



The Future of Grocery

How to
Streamline
Inventory
Management &
Increase
Productivity
Amid COVID-19

Case Study
Q3 2020



COVID-19 Has Deeply Impacted The Grocery Industry

Retailers are working relentlessly to maintain business operations amidst unprecedented times, while facing the new challenges of a quickly evolving landscape.

In this report, we will present solutions to the most common challenges retailers face:



How to get more timely and accurate inventory insights



How to keep shelves sufficiently stocked



How to track the most critical operational tasks



How to efficiently support over-extended staff



How to capture revenue growth opportunities



3 Main Impacts of COVID-19 on Retailers

Based on 5 retail chains analyzed by Simbe Robotics across the world



1 Panic Buying Led to Out-of-Stock Surge

Prior to the pandemic, the average out-of-stock rate was 3-6%^[1]. Simbe Robotics monitored on-shelf availability (OSA) beginning in early February 2020, capturing the surging OOS rate due to panic buying (Figure 1). Each region also had different out-of-stock (OOS) peaks based on the spread of the virus.

Since shelter-in-place, consumers intend to continue shifting their spending largely to essentials, such as grocery and household supplies (Figure 2). Consumption trends impacted OSA first in essentials (starchy foods, hygiene) and gradually shifted to home-cooking (cakes, bread baking).

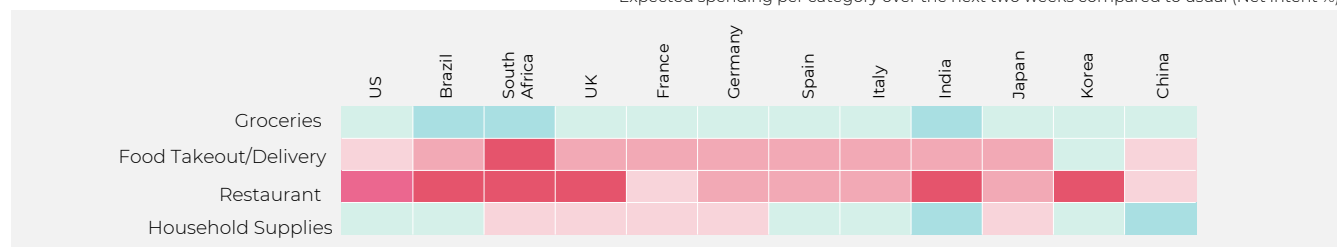
While most of the retailers perceive that the majority of the OOS situations are warehouse or supplier outs, nearly 30% of the OOS could be actually controlled and improved through better data collection and usage (Figure 3).



2020 PEAK / OOS Impact by region			
Asia-Pacific	Feb	USA - East	Mid-Mar
Western Europe	Mar	USA - Midwest	End of March
USA - West	Mid-Mar		

Figure 1 2020 Peak OOS Impact by Region

Figure 2 Global Consumers Anticipate Pulling Back on Spending across Categories



Source: McKinsey & Company COVID-19 Consumer Pulse Surveys, conducted between March 15 and June 21, 2020

Figure 3 OOS cases of Simbe's customers

20-30%
CONTROLLABLE
OUT ON SHELF

20-30% of detected OOS were not warehouse outs, instead could be solved by in-store action(s), such as restocking from the backroom, adjusting balance on hand to trigger warehouse replacement or notifying direct-to-store (DSD) delivery partner



2 Retailers hired more but had to adjust how store teams work

Retailers faced a difficult balancing act of both staffing essential front-line workers and keeping them safe. Surges in shopping trips, long checkout lines, and empty shelves in need of restocking required stores to quickly ramp up hiring. Large retailers including Walmart, Costco, Walgreens, Kroger, and Dollar General all announced they would hire more workers to keep up with rising demand and more complex store operations.

During COVID-19, demand peaks and troughs can be so immediate that it's difficult to predict and plan for in-stock inventory and staffing for delivery. This is when real-time on-shelf inventory information becomes even more critical by enabling visibility for valuable foresights.

On the other hand, while retailers added more staff to address the OOS issues, many of the new hires were temporary employees. This forced retailers to train new team members faster, improve operational efficiency, and re-allocate manpower to the most critical tasks.



“Retailers face tough decisions: If they staff up too much, they could have to pay idle employees. Yet, if they hire too few, they could fall behind in filling orders and meeting customer demand.

— CNBC, 22nd July

3 Changing consumer behaviors underscore the need for real-time inventory information

Among U.S shoppers during COVID-19

36% now visit fewer stores ^[1]

83% check item availability before visiting ^[1]

35% change preferred locations due to out-of-stocks ^[2]

↑40% of online shopping increases will survive the easing of lockdown measures in 2020 ^[3]

^[1] FMI, U.S. Grocery Shopper Trends 2020

^[2] & ^[4] AdvantageSales, Shoppers' response to COVID-19 and the outlook for change

^[3] Bain & Co



During the pandemic, consumers have become more aware of personal safety and health, and they have adopted new habits that affect where and how frequently they shop:

1. More online shopping: Digital and alternative fulfillment models (such as curbside pickup), which some retailers previously viewed as experimental, suddenly became must-haves. Buy-online-pick-up-in-store became increasingly important to shoppers and required store teams to focus on preparing orders for pick-up.

2. More spending per physical trip: While many Americans have experienced financial struggles during COVID-19, price and savings have not been primary factors for shopping decisions, meaning OSA is paramount. ^[4]

These changes in shopper behavior led to additional work streams, putting a premium on team time management and efficiency as well as localized inventory management.

“With COVID, we've seen a shift in consumer behavior to optimize their time in store. Shoppers spend more time preparing for their trip to the store and therefore are more impacted by out-of-stock items. For that reason, retailers have doubled down on operational excellence to ensure an optimal shopping experience.

— Brad Bogolea, CEO, Simbe Robotics



How Retailers Leveraged Robotics for a Better Shopping Experience

As a strategic partner to more than a dozen of the top global retailers, Simbe has been helping retailers navigate many of these challenges through its autonomous shelf-scanning robot, Tally. This all-in-one inventory solution has provided distinct economic value to stores of all sizes in a variety of ways.



Automatic inventory auditing

Amid pandemic-induced demand surges and labor shortages, Tally's core functionality has proven to be more critical than ever. By providing real-time data to retailers while enabling store associates to keep sought-after items on shelf and support customers, Tally has played a key role in maintaining OSA and adding efficiency to in-store teams.

Tally audits ~15,000-30,000 items per hour, freeing up as many as 100 hours per week for store teams



As a result of working with Simbe, we've experienced a phenomenon we call "The Tally Effect", an immediate improvement in in-store operations and increased teammates productivity.

— Dave Steck, VP of IT infrastructure and application development, Schnucks Market



Full Shelf View



Price & Promo



Products

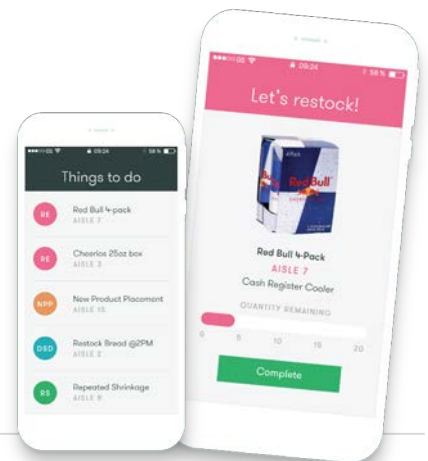


OOS v.s
Low Inventory



Real-time product location for picking & restocking

Demand surges pushed retailers to staff shelf replenishment teams with temporary, reassigned or new workers who did not always have the same experience and store knowledge of regular workers. Tally's location data has proven invaluable to helping them quickly learn where items belong, shortening the learning curve. In addition, as shoppers moved to online grocery shopping, Tally's location data has been highly beneficial in enabling in-house employees and third-party pickers alike in finding items and fulfilling these orders quickly to expedite the process.



Accurate and automated replenishment

After massive surges in traffic and sales in early March, retailers no longer had confidence in their automated inventory systems to effectively replenish. Leading retailers leveraged Tally to set perpetual inventory (PI) to zero for products that were not present on shelf and operationalized Tally's real-time data to ensure back office systems were utilizing accurate snapshots of store inventory counts for replenishment orders.

Audit **3 times** a day with
+97% accuracy



Scan **15K to 30K products**
an hour to unlock real-time
restocking alerts



Timely information for efficient online + offline shopping experiences

COVID-19 has radically accelerated the digital transition in the retail industry. This unexpected surge in online shopping poses a financial problem to the industry. For the vast majority of grocers, home delivery and curbside pickup are less profitable than in-store transactions, and in many cases, each order comes at a loss. Before the pandemic, many retailers hoped that consumers' unhurried embrace of online grocery would give them a few years to develop a business model that wasn't so margin-dilutive. Now, they must find a much more rapid fix for the broken economics of the channel—and at the same time, ramp up e-commerce capacity to meet the surging demand.^[1]

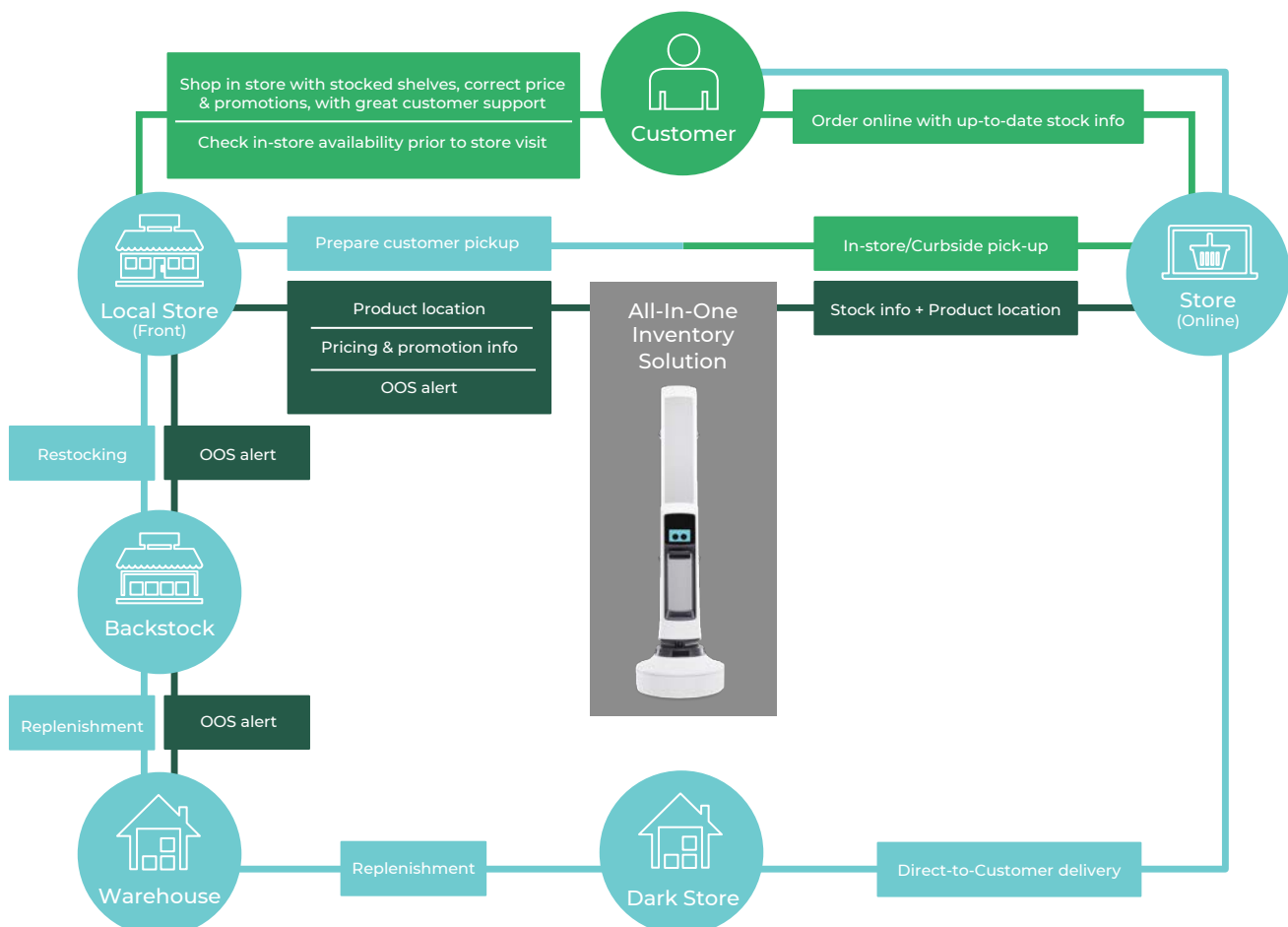


For Simbe's customers who intend to adopt a permanent dark store strategy dedicated to fulfilling delivery and pickup orders, Tally's autonomous auditing adds efficiency in a number of ways—first by providing exact location of products for preparing orders for pick-up and delivery, and secondly, by giving smarter control of inventory, ensuring the most critical items are replenished first and maximizing sales revenue. We also see grocers use Tally's real-time reporting to ensure shoppers know whether the items they desire are available before visiting the store. Last but not least, Tally's data allows online platforms to have real-time in-store stock availability, helping eliminate unfulfillable orders and improve online shopping experiences.

^[1] <https://www.bain.com/insights/how-to-ramp-up-online-grocery-without-breaking-the-bank/>

How Tally Empowers Critical Retail Actions for Better Customer Experiences

— Data From Tally — Retail Action — Customer Experience



ROI & Impact

Simbe's all-in-one inventory solution has been independently verified by a top-tier management consulting firm which proved:

10X

More out-of-stock items detected than manual inventory checks

20%

Average reduction in out-of-stock items in stores using Tally

70%

Labor hours saved thanks to boost in productivity

2.2%

Uptick in annual sales with optimized store execution and superior customer satisfaction

1 day

Tally is deployed and operational in-store in less than 1 day

30 days

Tally pays for itself as quickly as one month into deployment at a new store



Contact our team today to learn more about Tally for your business
sales@simberobotics.com

simbe

“ COVID-19 is a reminder that retail may need to reboot faster than anticipated. Given the margin pressures within the industry, retailers that want to remain competitive in the next normal must consider technology and automation a strategic imperative.

— McKinsey & Company