

White paper:

# The return of retail: Improving safety and ROI with digital signage



# Introduction

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The global health crisis may have accelerated the slow demise of some struggling retail chains, but the real story of COVID-19's lasting impact may be how it forced and subsequently cemented new shopping behaviors.

Lockdowns, indoor capacity limits and other health safety measures accelerated digital transformation plans for retailers of all types and sizes and pushed retailing out to the sidewalk and parking lot.

Services such as curbside pickup that were relatively rare became commonplace, and retailers that were already using digital signage technologies to attract customers and drive promotions found themselves relying on well-positioned, can't-miss displays as central components of running their transformed business operations.

This white paper takes a look at how the health crisis has reshaped aspects of brick-and-mortar retailing, making mall sidewalks and parking lots new retail battlegrounds and revealing new ways to drive tangible business impacts. Readers will learn how retailers have adapted to digitally transform store operations and why digital signage

technologies are critical to these new tactics and solutions. They'll also learn how and why digital signage touches shoppers all along the connected customer journey, and get a sense of how the return on their capital and operating investments are realized.

Digital signage technologies have long been central to the customer journey in retailing — with screens, software and complementary technologies guiding and informing shoppers and stimulating purchases. In a time of near constant change, they've grown even more important.

We've seen a merger of the convenience and speed of online shopping with the advantages of physical retail, and technologies are increasingly being used to anonymously follow, guide and influence shoppers.



# Adapt or die

The health crisis has been brutal on many retailers, with globally known brands and small, local businesses alike being forced to pivot and adjust repeatedly to abrupt shifts in how they operated. If they didn't adapt, many faced closing their doors for good.

By the fourth quarter of 2020, Forbes magazine had tracked the closing of some 14,500 stores in the United States — accelerating what has been a 10-year trend of physical stores shuttering as a result of failing to stay relevant in an age of increasing online sales and shifting consumer interests and behaviors.<sup>1</sup>

Varying measures forced stores to temporarily close, reduce the number of people allowed inside or move portions of their businesses online and outside. Some retail observers have suggested that COVID-19 forced retailers to either develop digital transformation plans or accelerate existing plans from three-to-five-year schedules to a matter of weeks or months.



One of the biggest losses to a consumer and to the retailer is the sense of product discovery and the associated sales. In the era of moving more traffic to curbside, every effort to retain the product discovery process must be leveraged. Digital signage bridges the gap by interspersing product discovery messaging between other use cases, increasing the value of the digital approach beyond a single use case.

Services like Buy Online, Pickup in Store (BOPIS) and Buy Online, Pickup at Curbside (BOPAC) were relatively uncommon outside of the grocery and mass merchandising business. Data from commerce platform provider Sygnifyd suggests that curbside service, prior to 2020, was known but rare.<sup>2</sup> Only 17 of the Internet Retailer Top 1000 offered curbside services before 2020, but now such offerings have become commonplace.

Faced with the inability to open their doors to shoppers, even operations such as pet shops, paint suppliers and liquor stores started selling online and facilitating pickups outside their entry doors.



For retailers, pushing business both online and outside enabled them to continue operations. For consumers, this was a way to get back to shopping that minimized health safety risks for themselves and retail staffers, and increased use of e-commerce and mobile commerce shows that consumers tried this approach and liked it.

Current research shows a strong interest in continuing contact-free shopping. Research from McKinsey, for example, suggests that 79 percent of consumers intend to continue or increase their usage of self-checkout in retail after COVID-19.<sup>3</sup>

An April 2020 customer feedback survey firm BizRate Insights found that 79 percent of U.S. consumers interviewed said changes in retail situations affected how they shopped.<sup>4</sup> The survey also showed that customers using curbside pickup had increased over the month of April from 40 percent to 86 percent, with continuing increases likely as the year progressed.<sup>5</sup>

McKinsey's "Consumer Pulse" research from mid-2020 found that many U.S. consumers who started or increased their use of BOPIS and BOPAC services intended to continue using them regardless of changes in restrictions around in-person shopping.<sup>6</sup> Some 47 percent of those interviewed planned to keep using curbside pickup options where they were available.

# Outside: Retail's new battleground

For curbside retailing, the breadth of services offered and level of sophistication can vary widely.

In some cases, smaller retailers have just facilitated transactions through online portals and enabled pickups by asking shoppers to call or text the store when they were parked outside.

For larger retailers, the process is often fully integrated with multiple information systems and intended to be seamless. For example, the big box mass merchandiser Target follows shoppers through the mobile or online ordering process and keeps communications consistent and timely for both the shoppers and the store staff.

The retailer's BOPAC strategy and platform use location tracking on the shopper's smartphone and will alert the store when a motorist approaches. A store staffer can then have the shopper's goods ready and waiting in a reserved space allocated for that order.

There's also everything that takes place in between the initial order and the pickup, but retail experts are consistently suggesting that the key to operating retail at the curbside is getting the communication right.

While consumer research implies that long-term habits are forming, these new processes are still new and sometimes confusing for many shoppers, particularly those trying them for the first time. Additional challenges may also be posed by the absence of standards and norms, as retailer A might handle BOPAC differently from retailer B.

That's why digital displays are essential to making curbside retailing work. Businesses need to guide their shoppers to where they are going, show them what to do, and keep them informed about the status of their pickup orders.

While the largest retail operators may have smartphone apps that are heavily used, fully integrated with their store systems, and familiar to customers, most cannot rely on smartphone usage alone. For example, orders started online on a personal computer don't leverage smartphone tools, so the most a retailer may be able to do is send text notifications.

Large displays located in windows or outside establishments can enable retailers to do several things, depending on the level of the displays' integration with other store systems.

At a base level, bright, prominent displays make consumers aware that a service exists and can trigger them to use it.



For shoppers who have completed BOPAC orders, display screens can:

- Greet them and direct them to parking, potentially offering parking stall assignments
- Tell them what to expect and do — such as stay in the vehicle and pop the trunk or rear hatch
- Provide rolling status updates, such as “Hi Jamie, your order should be out in three minutes!”
- Raise awareness of other offers and upsells, since the screen or screens can be “sticky” — something the shopper or motorist will repeatedly look at while they wait

Digital displays give retailers the ability to show multiple messages, adjust to changes and ensure that what they are communicating is accurate and on-brand.

Retailers scrambling to put arrangements in place have resorted to “hacks” like paper signs on sticks stuck in orange traffic cones to designate curbside zones. They may have tried corralling cars and shoppers using shopping carts as barriers. In some cases, they've forced people to get out of their cars and walk to the front door only to read a small poster taped to the window asking them to stay in their car and call a number.

When it's operated well, there is no friction in the curbside pickup process, and consumers pull away thinking that was a faster, easier and better way to get some of their shopping done. Curbside and related processes likely won't remove the desire for retail therapy — the pleasurable experience of browsing and looking around a store — but for everyday needs, these processes work.

# Making it work

The velocity of retailing change seen in 2020 was staggering, but much of the work to digitally transform businesses represented plans that were in progress or being actively explored and discussed.

The change breaks down to two core zones: the familiar one in-store and the emerging one outside traditional doors. Both are part of a new shopper journey that can begin well away from the store, on a PC desktop or smartphone app, and carries through to the store's surroundings, and then inside the physical establishment.

## The full shopper journey

Digital signage technologies have long been part of the fabric of many retail operations. Timely, relevant messaging greets and guides consumers from arrival and entry into stores, and all the way through to checkout and exit. The difference now is

how technology is even more a part of the journey.

Here's how that looks, by zone and scenario, in a setting familiar to every consumer: a big box store.

### The scene

**Arrival:** Screens at curbside pickup zones greet and guide unfamiliar users, as well as promote offers, programs and services available inside. Outdoor-ready screens atop curbside pickup lockers, driving awareness of the service and relaying what to do. Added RF sensors will allow for automatic notification of guest arrival to in-store teams and personalization of the display.

### The technology

**Fully outdoor displays:** Housed in weatherproof, vandal-resistant enclosures, large-format totem displays — whether single- or double-sided — can be networked and steadily updated with real-time customer messaging. Because the displays are in full sun much of the time, they have super-bright, daylight-readable screens and are engineered to operate reliably in harsh weather.

Outdoor displays are typically housed in custom enclosure totems that can be bolted to the ground to survive high winds, heavy rains and abuse from mischievous passersby.

The biggest technical challenge is often getting power to a display unit. Wall outlets and safety ramps that prevent tripping can work on sidewalks, but getting power to parking stalls can prove more elusive.

Coupled with multilateration radio frequency (RF) sensors tuned to measure customer presence, as well as display influence and effectiveness, the solution contributes to a better BOPAC experience for customers, with reduced friction and operational efficiencies.



## The scene

**Entrance:** RF sensors can help measure and manage store occupancy levels when restrictions are in place, even working in tandem with screens at entries functioning as automated stop-and-go lights that communicate estimated wait times. These artificial intelligence-driven systems provide retailers with ongoing, near real-time insights on how their stores work. They count and sort shopper traffic by everything from general shopper behavior profiles and busy/quiet times, and even provide insight on specific store areas and overall store performance/conversion rates.

## The technology

**In-window displays:** Retail operators with large windows that face walkways and parking areas can use extra-bright fixed window displays with the messaging facing outward. This removes the technical hurdle of finding power for fully outdoor units.

While in-window units don't require ruggedization for weather and vandalism, they do need high brightness levels to keep the content always viewable, even when the display is hit with the glare of direct sunlight. Conventional display panels and TVs might do the job at night, but their messaging would be unreadable on sunny days.

Window displays are also specially engineered to handle the punishing heat load of direct sunlight using designs that prevent heat buildups, which could otherwise lead to failure.

Because shop windows are often important "real estate" for retailers, Samsung's product lineup includes a super-thin, double-sided window display that allows one message to face out the window on a high-bright screen and another message to face the inside of the store on a regular screen. It's a nice aesthetic alternative to making shoppers see the metal back and cabling of a regular display.

Using displays coupled with RF sensors, shoppers can be educated and influenced by triggered content in the window displays. This culminates with measurements of messaging effectiveness available to the retailer to demonstrate ROI.



## The scene

**Inside:** The same RF sensor systems that provide insights at the entryways also help manage operations on both a tactical and strategic basis around the sales floor. For example:

- **Store management by zone:** Software can reveal store traffic and dwell times in busy areas, providing cues to management to add or shift staffing to meet needs.

- **Sales performance optimization:** Understand which products are selling, or struggling, against shopper traffic patterns. Insights can also guide overall store layouts and reveal which marketing campaigns and messages are resonating with shoppers.



**In the aisles:** Digital signage displays in a variety of sizes and configurations influence and drive the shopper experience around stores, at major walkways, the heads of aisles and nested with products and brands. For example:

- **Look-up displays:** Interactive displays in busy areas allow shoppers to locate goods and provide directions, verify availability and check pricing, or discover additional SKUs sold online, all without needing to look for staff or requiring a one-to-one conversation with a store associate that could pose a health risk.
- **Digital endcaps:** Premium merchandising positions like endcaps have digital display components that drive product awareness and promotions, and encourage product education through videos triggered by proximity sensors or when a shopper lifts a product.
- **Product signage:** Along the aisles, small screens nested at the shelves drive special offers or enable dynamic, flexible price changes.

**At checkout:** Queue management platforms are now widely used in large retail environments. Retailers that use single-line setups that lead to multiple payment positions leverage sensors and screens that sort and direct shoppers, while also making them aware of store special events and programs like loyalty cards and store credit cards.

**Behind the scenes:** Screens behind the scenes are increasingly important, particularly in large footprint, high volume businesses. Retailers are using screens for:

- **Breakroom communications:** These include new policies, procedures and programs, as well as for staff recognition and recruitment. Break rooms represent a rare opportunity to communicate with staff who don't have company emails or mail drops.
- **Operations status and notifications:** Screens tied to real-time data from store business systems and mobile app platforms make staff aware of everything from click and collect BOPIS or BOPAC orders to dwindling inventory levels or arriving delivery trucks.

## The technology

Modern digital signage content management systems, such as Samsung's own MagicINFO software platform, coupled with RF sensor-triggered communications, can define and handle all the messaging specifics needed to drive effective curbside retail operations.

Automating and managing notifications from these can be relatively simple, with the wild card being whether a retailer's business systems are designed to work with external systems. Ideally, a combination of open information platforms, shared data, sensors and dynamic messaging can largely automate the delivery of messaging tailored to individual customers.

Even without that degree of sophistication — which a system can grow into — a curbside or window display system can do the important work of informing customers about services through a rotating cycle of messages.

Regardless of store size or type, digital signage is widely used as a means of effectively communicating to shoppers. Even for a small, intensely local business, screens have the ability to welcome, inform and influence shoppers — driving bottom lines and building habits for long-term customers.



# Realizing an ROI

Perhaps more than ever, technology investment plans in retail need clear and solid Return on Investment (ROI) models. For most retailers, that boils down to two things:

- Improve shopper basket sizes
- Deliver in-store operational improvements

Screens that positively intercept, disrupt and influence shopper behavior can have a direct influence on sales. Digital signage has been part of retailing for many years now, and there is plenty of evidence that promotions on screens raise awareness and directly influence purchasing.

Historically, promotions have been scheduled to screens, usually well in advance, and designed to work in tandem with other store marketing and merchandising campaigns and seasons.

The receiver in smart displays is triggered by smartphones entering the defined geo-fenced area of the store property (inside/outside), and tracking behaviors. A few things can happen out of that:

- For customers with store loyalty apps on their phones who have opted in, the screen management platform can be configured to react and market to specific shoppers. In real-world terms, that could mean a woman shopping in a beauty brand store might see brand marketing for a new product launch, because the loyalty program shows an interest and habit of buying that kind of product, and an affinity for a brand. It could even be influencing known users of one brand to try a rival brand.
- If shoppers are not part of a loyalty program, fully anonymous and secure tracking can still measure passive loyalty and overall connected journey, providing insights on shopper behaviors and influencing what happens. The right screen messaging can drive shoppers to less trafficked parts of stores and reduce abandonment numbers.
- Data insights from receivers and other internet of things technologies, such as computer vision and RF sensors, can analyze the state of store shopper volume, demand levels and inventory counts, and then do dynamic promotions and even pricing.
- In grocery or food production, imagine the power of doing automated clear-out pricing on screens, based on inventory levels of perishables and the time of day.

Now, technology is allowing retail marketers, merchandisers and brand category owners to hyper-target messaging in near real-time, as well as refining message effectiveness with decisions shaped by data and triggered by preset parameters and thresholds.

Samsung's Smart Signage displays have radio frequency receivers built into the screens, which work with content management and retail analytics software to provide insights on how stores are working, and then trigger automated actions, like promotional messaging tailored all the way down to shopper profiles.

Data insights paired with digital signage technologies also help optimize in-store marketing. A/B split testing common for online marketing can now happen on screens on the sales floor. With digital handshakes between business systems now easy, accessible and secure, store managers can compare different versions of promotions on screens and have a clear view on which ones perform best. The right A/B testing of the messaging with the ability to measure the result can iteratively drive more effective messaging, leading to better results.

In-store analytics can reveal critical, cost-saving insights and actions. For example:

- **Conversion ratios** based on foot traffic and the direct ties between on-screen promotions and sales
- **Engagement** by understanding which displays attract and hold viewer attention, and which under-perform and need to be re-thought, in terms of content and even positioning
- **Store experience** can be measured by metrics like visited areas and average time in checkout, and line abandonment measures. AI-based sensors can even alert managers for customer experience issues such as having more shoppers than available staff, or checkout lines with wait periods longer than acceptable thresholds (abandonment mitigation). A simple notification to a phone, or even on a back office signage display, can alert a manager to reposition store associates or open up additional cash positions.

Displays also provide the ability for retailers to support in-store brand partners, and even monetize the screens by selling on-screen time to endemic brands, especially when the systems are capable of measuring views and actual influence to validate the ROI.



# Getting started

What systems to update and how to update them will likely depend on the size of a retail operation and the amount of work it is already doing around e-commerce and mobile commerce. Large retailers with in-house or outsourced information systems teams can look to software providers and specialty display companies — many of whom partner with Samsung — to specify the optimal processes and technology.

Less experienced retailers can look to local or regional pro AV systems integrators and digital signage solutions providers, as most will have extensive experience and insights to offer in retailing.

The good news is that today's digital hardware and software are increasingly open — yet secure — and designed to evolve, which means retailers can start with a simple setup and grow into a more sophisticated system over time.

There are also other considerations for the retailer and the venue. Operators have to consider how their inventory and ordering systems work, logistics and packaging, and how the store's operations will change when some of its customers no longer walk through the door to pay.

Best Buy, for example, has started redesigning stores by redesignating large patches of retail floor space for use in staging and facilitating curbside pickup and BOPIS. It is easier than ever for retailers to take these projects on, so long as they have the right technology partner. Though known for its huge range of commercial display options, from LCDs and QLEDs to direct view LED video walls, Samsung also has the in-house ability to provide MagicINFO content management software and analytics technology, working seamlessly with displays.

Samsung also offers technical and warranty support, and has a managed services business unit that can take on the tasks of monitoring and managing the uptime of the retail screen network, allowing a retailer's often finite IS/IT resources to focus on core operating items like store systems, transactions and data security.

Apart from pure technology issues, stores and landlords also have to think about parking lots — everything from changing traffic patterns and sight lines to making power available at parking stalls — which they may never have needed or even considered in the past.



# Experimenting is over

While many consumers will welcome the return of safe, uncomplicated shopping expeditions to their favorite retailers, there is little evidence to suggest that curbside retailing is just a phase that will go away.

Retailers may have experimented with the idea of curbside services or side-of-store pickup lockers for years, but retail analysts are now saying that a year spent shopping during a global health crisis has changed habits and preferences. The services emerging now will evolve, but they are past being experiments and trials.

The bottom line to success, retail observers say, is delivering a convenient service that new or existing customers will use and like — one that they will want to add to their own habits. One of the keys to accomplishing this is helping customers understand what they need to do to access those services, and nothing does that better than dynamic, simple-to-manage digital displays.



Learn more about Samsung displays [here](#).

## Footnotes

1. <https://www.forbes.com/sites/walterloeb/2020/07/06/9274-stores-are-closing-in-2020--its-the-pandemic-and-high-debt--more-will-close/?sh=5b43207729f>
2. <https://www.signifyd.com/blog/2020/05/26/curbside-pick-up-during-covid-19/>
3. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19>
4. <https://bizrateinsights.com/resources/coronavirus-and-the-consumer-one-month-later/>
5. <https://bizrateinsights.com/resources/when-will-curbside-pickup-become-the-norm/>
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