POS TECH GUIDE:

New Roles for a Changing Retail Environment

INTRODUCTION

COVID-19's impact on store technologies has been widespread, but it's had a particularly strong effect on the point-of-sale (POS). According to the 2020 *Retail TouchPoints* Store Operations Benchmark Survey, **payment/POS** leads the list of contactless solutions that retailers have implemented, at **71%**, followed by curbside pickup at **63%**. The accelerated adoption of curbside services also presents its own unique set of challenges in terms of payment and customer identification, as well as the need for **enhanced network security**, **outdoor wireless access points** and **robust cellular connectivity**.

Retailers are faced with the dual challenge of making payment processes both **frictionless** and **hygienic**. One effect has been an acceleration of the trend toward mobile payment: **57%** of associates are using their devices for this function, according to the Store Operations Survey. Retailers also are taking a renewed interest in other "touchless" POS technologies, including:

- Payment methods that allow shoppers to **tap or wave their phones** or **chip-enabled credit cards**;

- Scan-and-go solutions that allow shoppers to pay **using their own mobile devices**;

- **Cashierless solutions** that use a range of in-store cameras and sensors;

- Solutions using **biometric identification tools** such as facial recognition and palm print recognition; and

- **Gesture- and voice-based tools** that minimize the need to touch POS hardware or credit cards.

This *Retail TouchPoints* Tech Guide will explore how retailers can adopt these technologies while maintaining the accuracy, data-gathering and payment security required at the POS, as well as how more traditional POS solutions can be adapted for the era of COVID.

The Rise of Contactless Payments

While COVID-19 has changed retailers' decision-making about their point-of-sale investments, many retailers were not starting "from scratch" in adapting to the rise in contactless shopping. Modern POS terminals already were equipped with the technology to support a range of contactless payments, such as Apple Pay, NFC and chip-enabled credit cards.

"There is interest and increased adoption of contactless payment methods among all categories of users across generations, particularly Gen X, millennials and Gen Z," said Anshuman Jaiswal, Principal in the Digital Transformation practice of **Kearney** in an interview with *Retail TouchPoints*. "As a result, adoption of such technologies will irreversibly rise among retailers in order to serve growing consumer adoption. Scan and go (whether mobile QR code-based or biometric-based) will be on the rise due to the need for contactless and frictionless experiences."

Two major retailers, **Kroger** and **Best Buy**, are in the process of updating and adapting their POS systems to enhance the customer experience. "Kroger is aiming to improve customer experience with cloud-based omnichannel technology," said Jaiswal. "Kroger has housed POS, inventory and promotional capabilities under one cohesive interface, no matter the device being used. Best Buy has enabled staff to painlessly access its POS system across multiple devices (mobile tablet, kiosk or POS register), so staff are always equipped to quickly serve customers around the store. The new system cuts down the time it takes to train new staff, and the time it takes for those trained staff to complete transactions. It supports contactless payments as well."

While not all POS hardware elements may require immediate upgrades, with each change to checkout processes retailers will incur additional expenses in the form of employee training, tech support and maintenance.

"There are other new elements of contactless shopping, such as contactless menus, curbside pickup and delivery, which each require having an in-house tech team or hiring outside consultants, technology integrators or additional services," said John Harmon, Senior Analyst at **Coresight Research** in an interview with *Retail TouchPoints*.

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>
> ### ANSHUMAN JAISWAL, KEARNEY

Mobile POS Meets New Requirements of BOPIS and Curbside Transactions

Beyond the traditional checkout, the acceleration of mobile POS has picked up steam, with retailers looking to create further flexibility in the checkout experience — including the ability to support **click-and-collect and BOPIS orders** at the store level.

"There's now between **15%** to **30%** more online shoppers, and curbside pickup and BOPIS has picked up as well — and more ecommerce also means more returns are being processed," said Jaiswal.

Curbside pickup poses several challenges for retailers, ranging from different transaction rates charged when a card is not present to real-time location tracking difficulties that lead to lag times. Additionally, a lack of standard best practices can make the process confusing for customers. The need for **enhanced network security**, **outdoor wireless access points** and **robust cellular connectivity** will be critical to successful curbside operations, said Jaiswal.

With surging online orders, some retailers have found the need to upgrade their devices. "The biggest move was the deployment of new mobile devices," said Greg Buzek, President of IHL Group in an interview with *Retail TouchPoints*. "Some segments saw **400%** increases in their digital orders, so that was tough on existing hardware and software. Those who saw a surge in business bought new; those who saw sales drop tried to make do with what they had."

The use of mobile POS for BOPIS and curbside also underscores the importance of bringing the store's POS systems into closer integration with online sales. "Many retailers are looking to change their architecture and support an edge architecture," said Buzek.

The POS terminal market is expected to register a compound annual growth rate [CAGR] of 20%, and mobile POS is gaining traction, according to Kearney. "Retailers will likely lean toward cloud-based POS solutions that are device-agnostic, channel-agnostic, and that can be scaled and fully integrated with ecommerce, omnichannel needs, BOPIS and curbside," Jaiswal said. **"These integrated POS system are capable of tracking data from transactions, maintaining inventory, producing reports and storing contact data from customers."**

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GREG BUZEK, IHL GROUP

Ecommerce Integration Becomes Even More Critical

With surging ecommerce growth, it is essential that POS platforms have omnichannel capabilities. "This means being able to manage *orders*, not just *transactions* (i.e., tracking which customer ordered what to facilitate things like curbside pickup)," said Peter Olanday, **Vertex** Retail Practice Leader – Consulting in an interview with *Retail TouchPoints*. "They also have to have the ability to 'send sale' or ship orders to customers' homes, not only process cash-and-carry in-store purchases. POS and ecommerce platforms need to work more seamlessly than they ever have, and [they] need to be integrated more closely on the backend. This includes tax calculation to ensure consistency across all the channels. **The brick-and-mortar store and the online store need to be extensions of each other, not separate channels anymore.**"

Close communication between in-store POS and online commerce systems aids in inventory alignment, helping retailers both anticipate demand and make inventory available for in-store and online orders. However, there can be an information gap, Harmon said, particularly when "POS systems aren't automatically linked to the retailer's customer relationship system."

Kearney's Jaiswal also highlighted the importance of creating a unified view of **inventory**, **loyalty**, **transactions**, **promotions** and **personalization** across all shopper touch points. "Better integration across channels can also yield lower costs, improve forecasting and procurement, and enhance business intelligence capabilities," Jaiswal added.

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> **PETER OLANDAY, VERTEX**

Innovative Solutions Could Shorten Lines, Improve Safety Perceptions

Lower-contact POS solutions are prevalent now thanks to COVID-19, but which of the various options will be most useful to retailers in the long term?

So far, scan-and-go solutions, which allow shoppers to pay using their own mobile devices, are showing promise. "It's a huge opportunity. People hate lines," Buzek said. "There will be a **284%** increase in this in the next two years of using customers' phones for checkout."

While these solutions fit safety protocols by eliminating contact between the cashier and the customer, they also remove contact between the cashier and the items being purchased, opening the door for fraud and theft. "Scan and go has much promise, although there are still issues to be resolved," said Harmon. "**Walmart** discontinued its use due to theft; however, **Sam's Club** is now using it."

Cashierless solutions that use a range of in-store cameras and sensors can add a layer of security to the checkout process, as is the case with **Amazon Go** and tech from solution providers such as **Zippin**. All these companies are banking on rising consumer demand for checkout that doesn't require interacting with a human. "More than **50%** of customers prefer stores with cashierless experience or self-checkout features," said Jaiswal.

"[Cashierless technology] still hasn't hit the mainstream, likely due to the expense and IT maintenance required to sustain it," said Harmon. "It seems best suited for convenience stores (where the number of SKUs is limited), although **Amazon** says it has scale and is testing it in a full-size grocery store."

Additional POS solutions that are on the next frontier but are still far from mass adoption include:

▶ **Biometric identification tools such as facial recognition and palm print recognition.**
"Consumers are leery of using facial recognition in the U.S., however some retailers are using cameras for emotion detection," Harmon said. "**Amazon** is testing palm print identification. I think this has more promise, since it is voluntary and can get you in and out of the store faster." COVID-19 also may have impacted consumers' trust level for these types of technologies. "I think some of the biometric things that were showing great promise might start to see some pushback due to the Big Brother nature of how states are using the technologies to track for COVID," said Buzek.

▶ **Gesture- and voice-based tools that minimize the need to touch POS hardware or credit cards.**
These tools offer strong opportunities in terms of associate communication, picking and order management, Buzek said, but he doesn't necessarily see their application in POS solutions. Retailers including **7-Eleven** and **Walmart** are experimenting with new voice ordering solutions. "Voice commerce has picked up quite significantly across major retailers due to the penetration of smart devices such as Alexa, Bixby, Siri, Microsoft Cortana and Google Home Assistant," said Jaiswal.

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Jessie is a retail expert, design lover and storyteller. She has never turned down an invitation to go shopping — in the name of research, of course.